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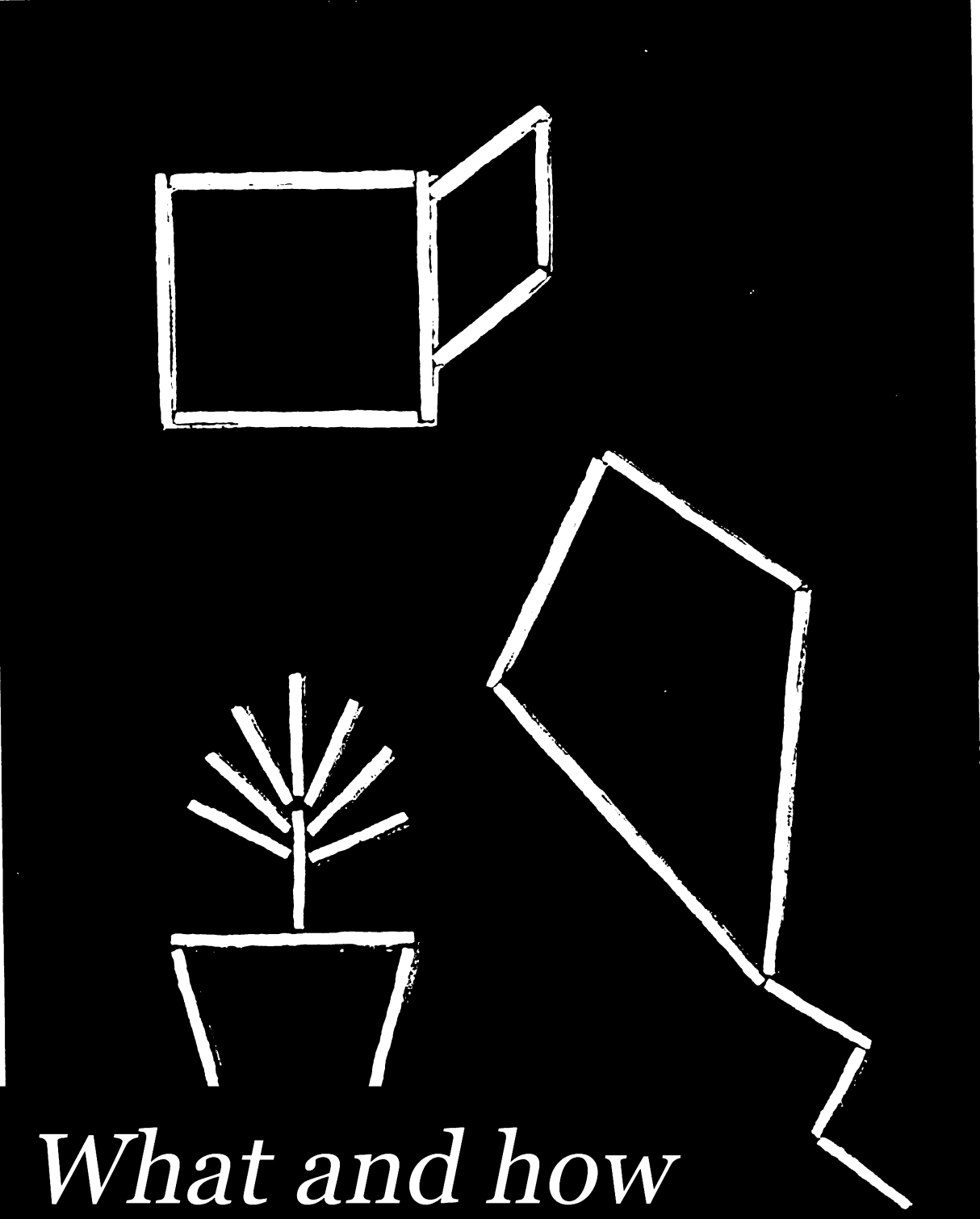

What and how

Anna Wilson Henderson, Hasbrouck Osterhoudt Palen

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WHAT AND HOW

A Systematized Course of Hand Work

FOR PRIMARY GRADES
FOR RURAL SCHOOLS
AND FOR THE HOME

BY
ANNA W. HENDERSON
AND
H. O. PALEN

SPRINGFIELD, MASS.
MILTON BRADLEY COMPANY
1908

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PREFACE

This book is intended to "bridge the gap" for the little child just entering school, in a way to make the change from the freedom of the home to the restraint of the schoolroom less abrupt and irksome than it might otherwise be, and to help the teacher arouse and hold his interest through *things* while he is learning to use books.

He cannot and should not "keep still," so let us keep him interestedly and profitably busy during this critical transition period.

The book will also be found helpful to the mother in the home, whose manifold duties often leave her little time to provide something worth while for little hands to do.

To the little children, their mothers and teachers this book is affectionately dedicated by the authors with the earnest hope it may accomplish that whereunto it is sent.

H. O. P.
A. W. H.

SAN FRANCISCO, CALIFORNIA, September 1, 1908.

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THE PROBLEM AND THE PLAN

THE PROBLEM

Probably no more persistent or puzzling problem confronts the busy teacher, whether she have one grade or eight, than to provide profitable occupational work for beginners, if they are included in her classes.

This work should be more than busy-work, more than merely hand work. It should appeal to the combined energy of head and hand, remembering that when hand work through oft repetition ceases to be head work, it no longer has an educative value.

Further, it must of a necessity be work which can be done independently without the direct supervision of the teacher, and should be of such a nature as to require the least amount of time on the part of the teacher in preparation of material.

We are happily past the day in which it is necessary to use argument in favor of manual training; it now only remains necessary to convince the busy teacher of several grades that she can introduce it into her already crowded school program.

We receive into our public schools children six years old, fresh from home freedom and activity.

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We place in their fingers pencils with which to draw apples or form letters before they have the finger control to guide the pencil or the training of the eye to see intelligently that which is set before them.

We have each probably had at some time in our school experience a "pudding-fisted" boy, six years of age, perhaps, but not six years in maturity; one who handles his pencil as if it were a poker, and, save for the friendly aid of pictures, is at a loss as to whether his book is right side up or upside down. It is a pedagogical crime to force upon this child either pencil or book at this time, bringing as they do, a period of discouragement, a loss of self-confidence, a giving up of striving, and, finally, a sense of being out of the race altogether.

Give him instead a nice soft piece of clay. Now watch the transformation. How he smiles over this pliable mass! How careful the touch and pat! How proud of the finished object! Would he not like to express the thought: "Take away those meaningless pot-hooks; give me something to *make!*"

After a few weeks when his fingers are not quite so "wobbly," and the pencil is not such a long unmanageable stick, the pot-hooks will not be meaningless, and, should he write a line backwards, he knows for himself that something is the matter.

In schools of several grades, beginners receive fifteen or twenty minutes' attention in class after the opening exercises, then must wait while five, six, or

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possibly seven classes recite before another period of fifteen minutes is devoted to them. What are they doing all this time? Concentrated study is out of the question at this age.

This is the period which transforms many happy-faced children, who have looked forward for half their short lives to the wonderful time when they should first go to school, into sober little automatons, or listless little pessimists who "do not see the use of it," or defiant little law-breakers who play truant in the face of retribution sure and swift.

Instead of "filling in" this period with haphazard "busy-work," which is ofttimes a mere time killer, the futility of which is evident to the child himself, why not devote this time to a systematized course of hand training in which there is development and mental growth? This is the opportunity for laying the foundations of manual training.

As to the all-important question of what to do, it is the purpose of the following pages to show, not only "*What* to do," but "*How* to do it" with economy of both time and labor on the part of the teacher.

THE PLAN

It is not the purpose of this book to outline a specific course from which no departure may be taken, but rather to offer suggestions along practical lines, which the busy teacher may adopt and adapt as the conditions of her school allow.

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As a general plan it is suggested that five occupations be used—one for each day of the week—from the opening of the fall term until January. At first glance this may seem too great an undertaking, but after due consideration it will commend itself even to the busiest.

If unorganized, haphazard "busy-work" is done, many times five kinds of work are done if not *over*-done in the same length of time.

By having a general scheme of work to cover a certain period, the work is planned for that time, and the teacher is relieved of the ever-present, harassing question of "what to do" for seat work. It must also be remembered that only by regular work at regular intervals can satisfactory results in any line of work be attained.

It is not intended, nor is it desirable, to always repeat the same occupation on the same day of the week, but that each occupation shall be given once a week.

While, as has already been said, it is not intended to lay down arbitrary work along these lines, yet, for the benefit of those busy teachers whose daily work it is not only to hear recitations of many classes, in their numerous subjects, but also to plan their work for the morrow, a daily program is added on pages 156 to 159, hoping that it will to some extent be the key which solves the seat-work problem.

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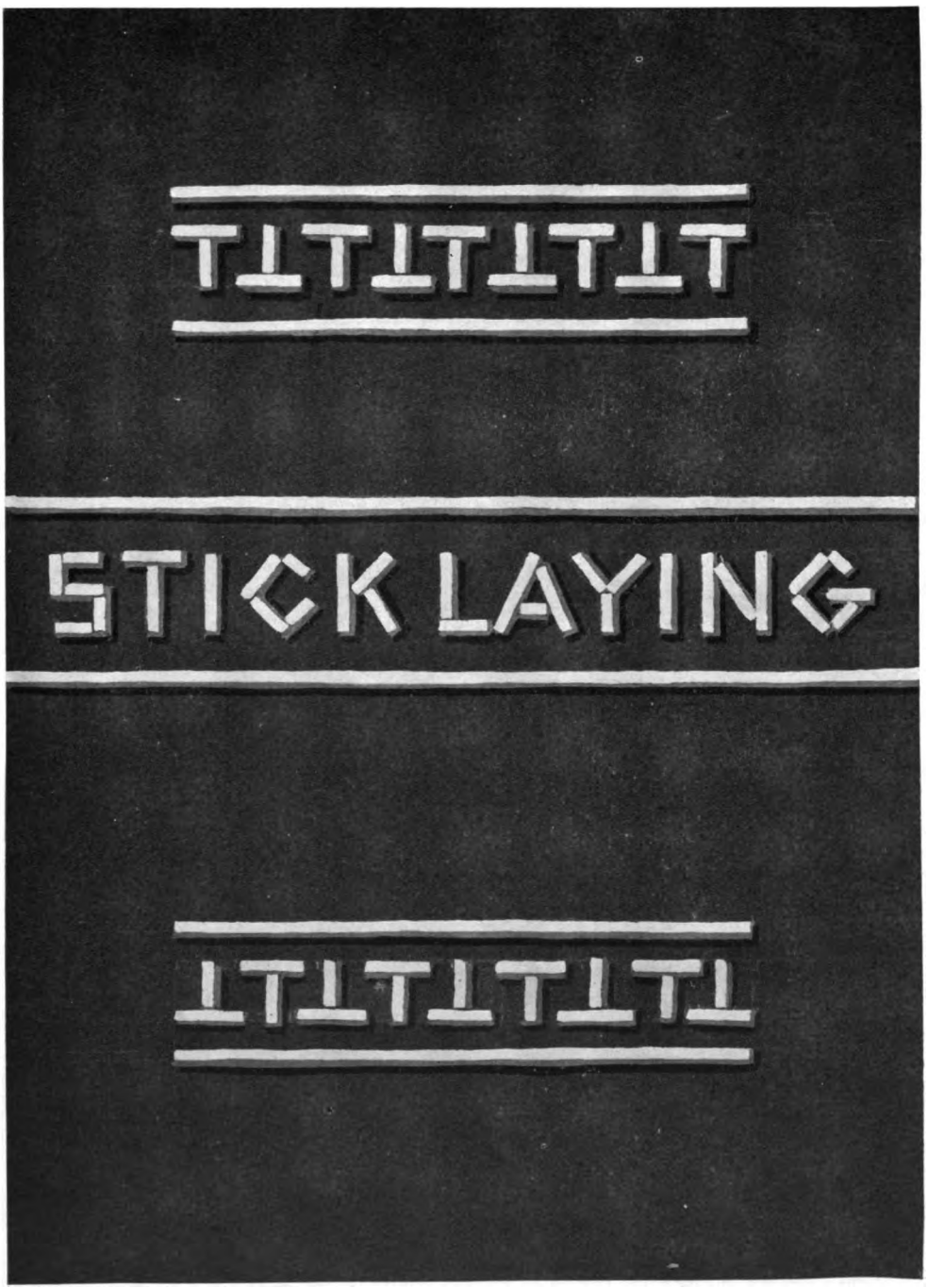

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STICK LAYING

Stick laying of simple forms is the occupation which may be given to the child the first day of school. If our little lad, wide-eyed, and with every sense alert for the keynote of his first year's work, finds upon his desk, that critical first hour of the first day of school, a box of sticks, he can go to work at once making chairs, tables, and other familiar objects, should more advanced classes engage the first attention of the teacher.

In copying forms, let long lines be represented by long sticks whenever possible. The use of one inch sticks only is a weariness to the flesh and a strain on the nerves.

After the interest in this copying of simple forms has waned—and it is not desirable that it should last long—introduce a number element. Children delight in counting; let them place forms which require counting,—geometric forms or series of forms.

In this connection a number lesson is shown on page 22, in which a number sequence from one to nine is represented by simple forms made of sticks of equal length. Other ideas will suggest themselves. For instance, say to the class: "To-day you may make

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things that take just four sticks. See how many different things you can make with four sticks for each one;" or, "Let the sticks count for us to-day. Put one stick in the first row, two sticks in the second, three in the third row, and let them count this way until we have nine rows."

From these geometric and regular forms develop borders. Lead the class to observe borders on books, baskets, towels, etc., so that they get the idea of the repeated unit; then let them invent borders. This will awaken great interest and a wonderful variety of results will follow.

Here we have reached inventive work, which, when properly directed and controlled, is one of the highest forms of educative work.

In this and all other forms of imaginative or creative work, the child must have the ideas before he can express them. To this end graded exercises are given. First, the idea of the border is developed by observation and by copying from the blackboard. Then unfinished borders are placed on the blackboard to be copied and finished by the class.

Next, simply the unit may be given, from which a border is to be developed. *Suggest* a border by saying: "To-day make a border of squares for me," or, "Make a border of the letter T. You may stand it upright or place it upside down."

The first two borders on page 24 may be varied by making units of groups of two or three.

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Have borders made in connection with stories. After reading the story of "The Little Pine Tree," a border of conventionalized tree forms may be made.

By this time their heads are full of borders, they are making them at odd times on paper and on the blackboard, and when finally you say, "To-day I want you to 'make up' a border for me," they fall to work with eagerness and zeal.

The results will be faulty, but, by emphasizing the good points and eliminating poor lines and construction, good well-balanced work will surely grow out of it. In criticising this work the criticism should not be so severe as to crush originality, yet out of chaos a clear notion of a border must be developed. Let simplicity be the keynote, so that the repeated unit shows plainly. Keep the *application* of the border before the class, by having them tell for what purposes their borders might be used. From stick work to pencil work is but a step. It will be found, however, that after this preliminary work with the sticks the pencil work is more accurate, more definite, and in better proportion.

In work with sticks of various lengths, designate each stick by its length. For instance, say: "We will use the one-inch and the two-inch sticks for our border to-day," or, "Use your five-inch sticks for your long lines in this picture." Thus, incidentally, a definite notion of the inch as a measuring unit will be formed.

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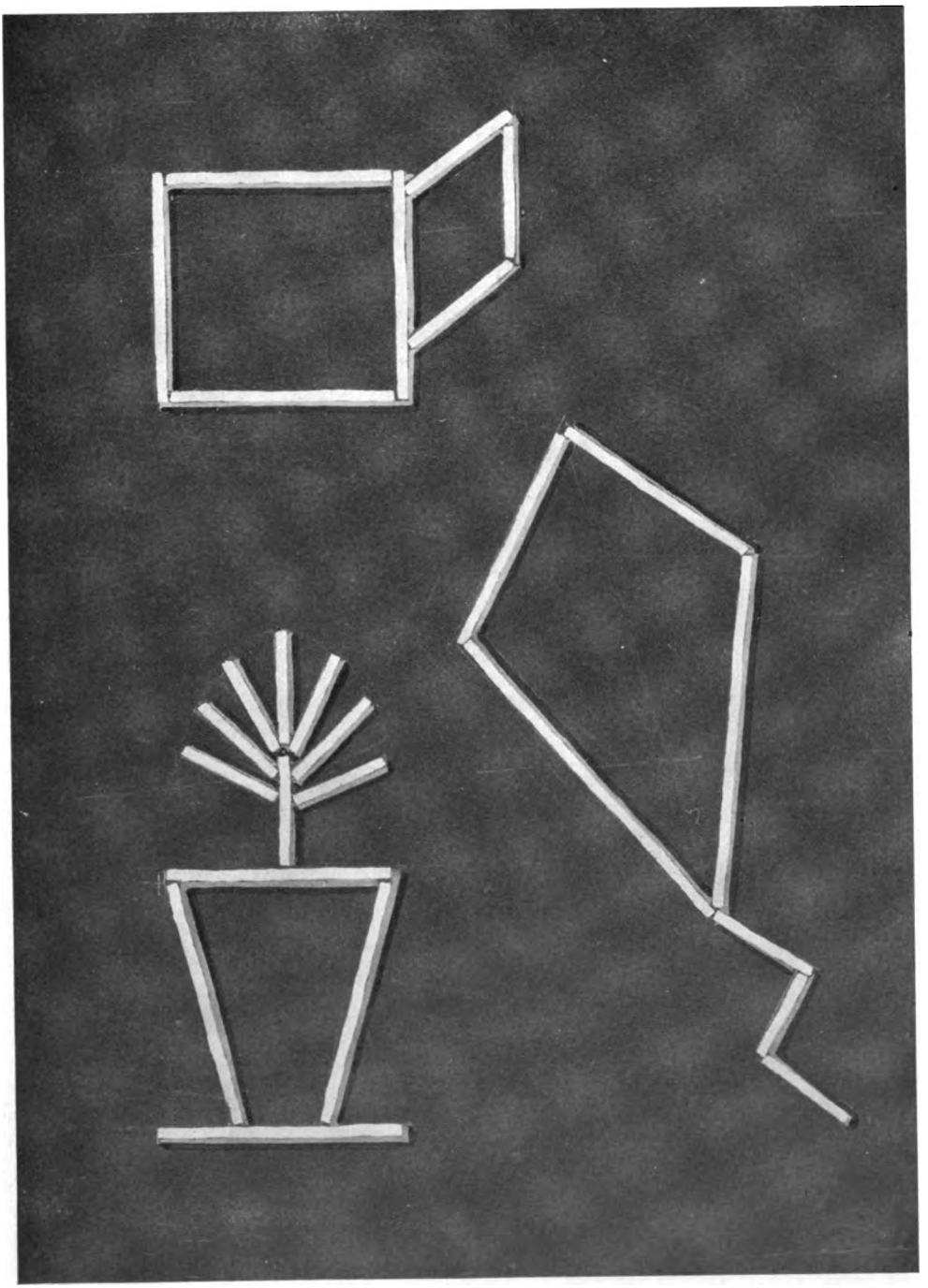

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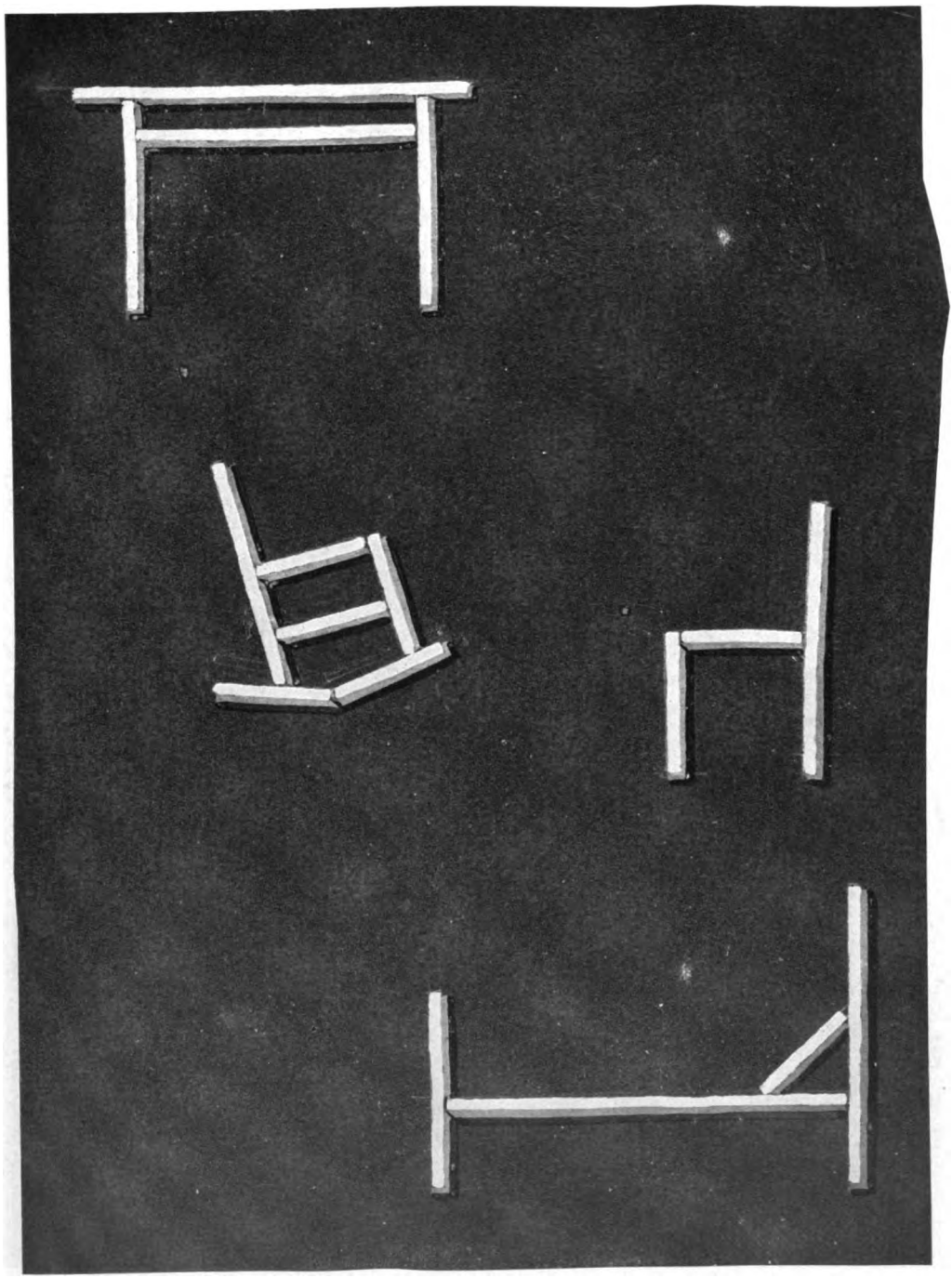

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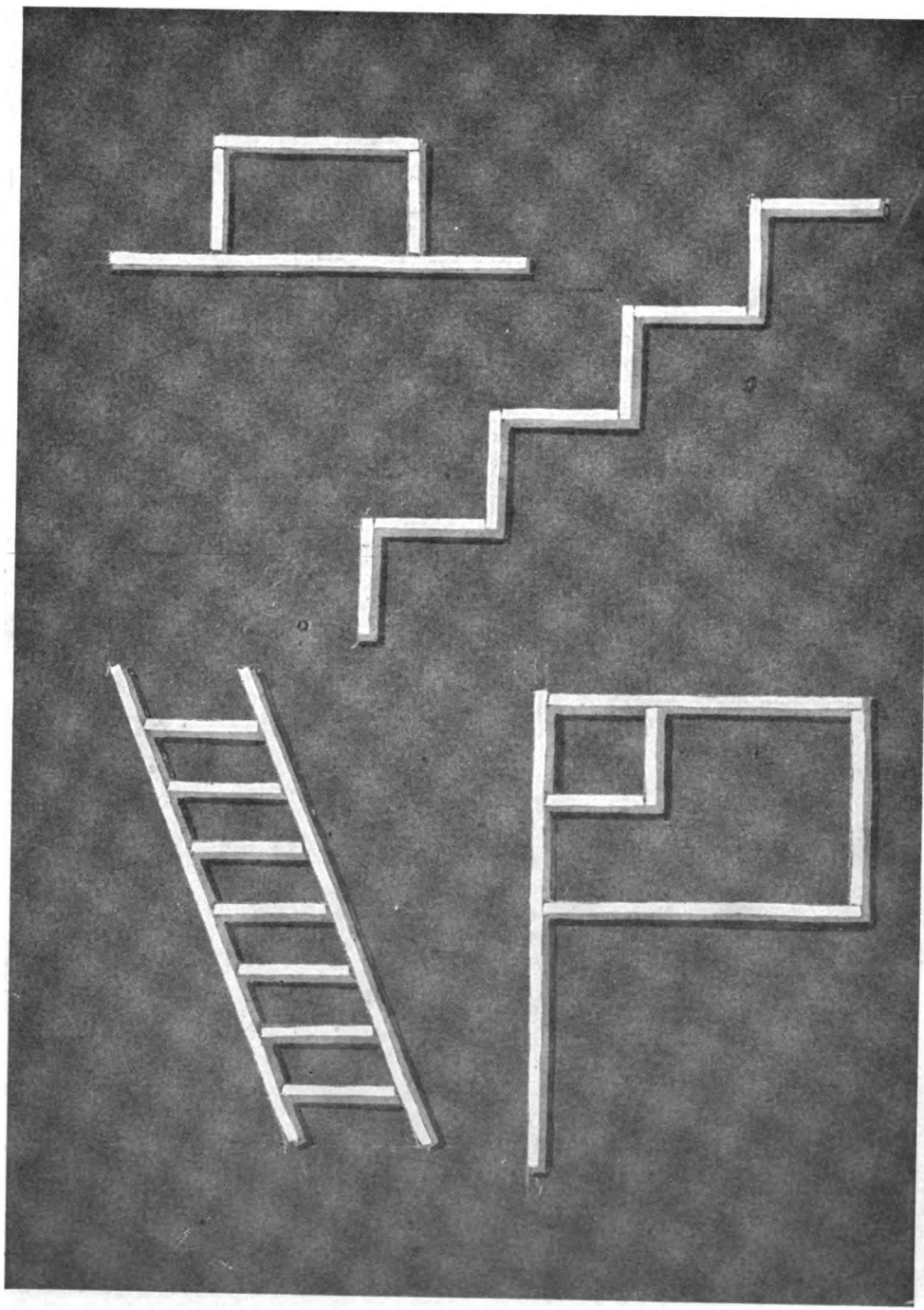

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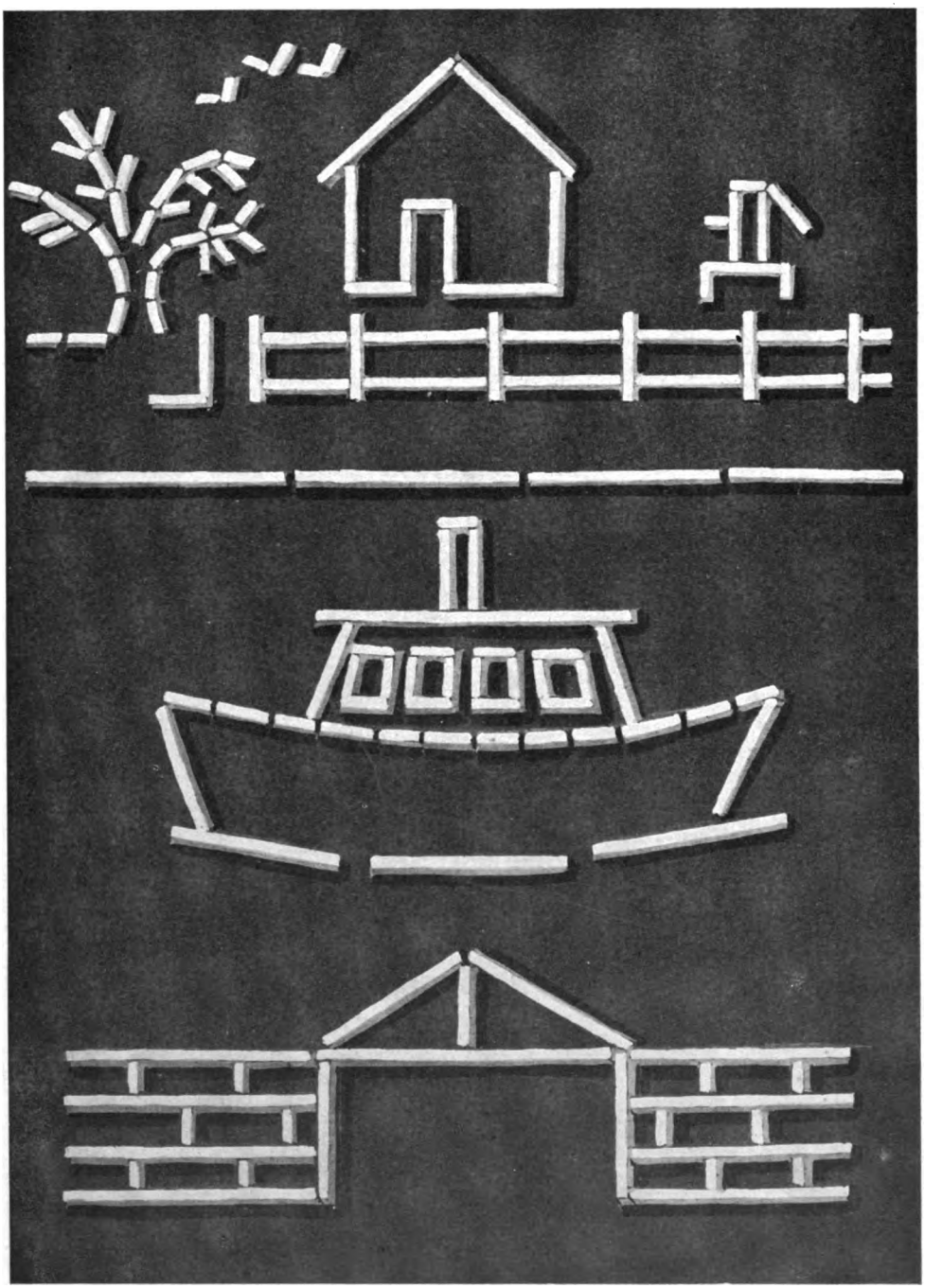

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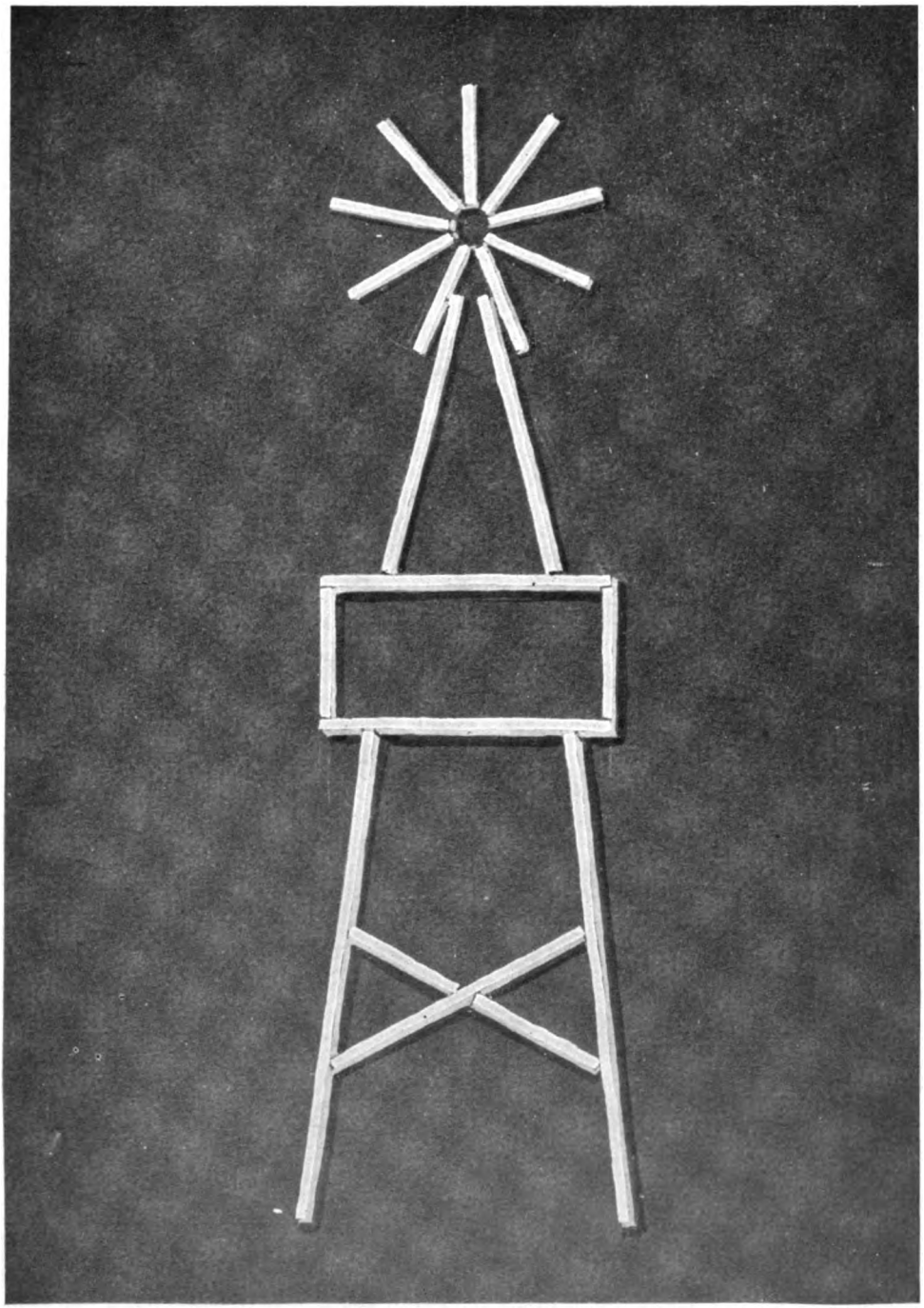

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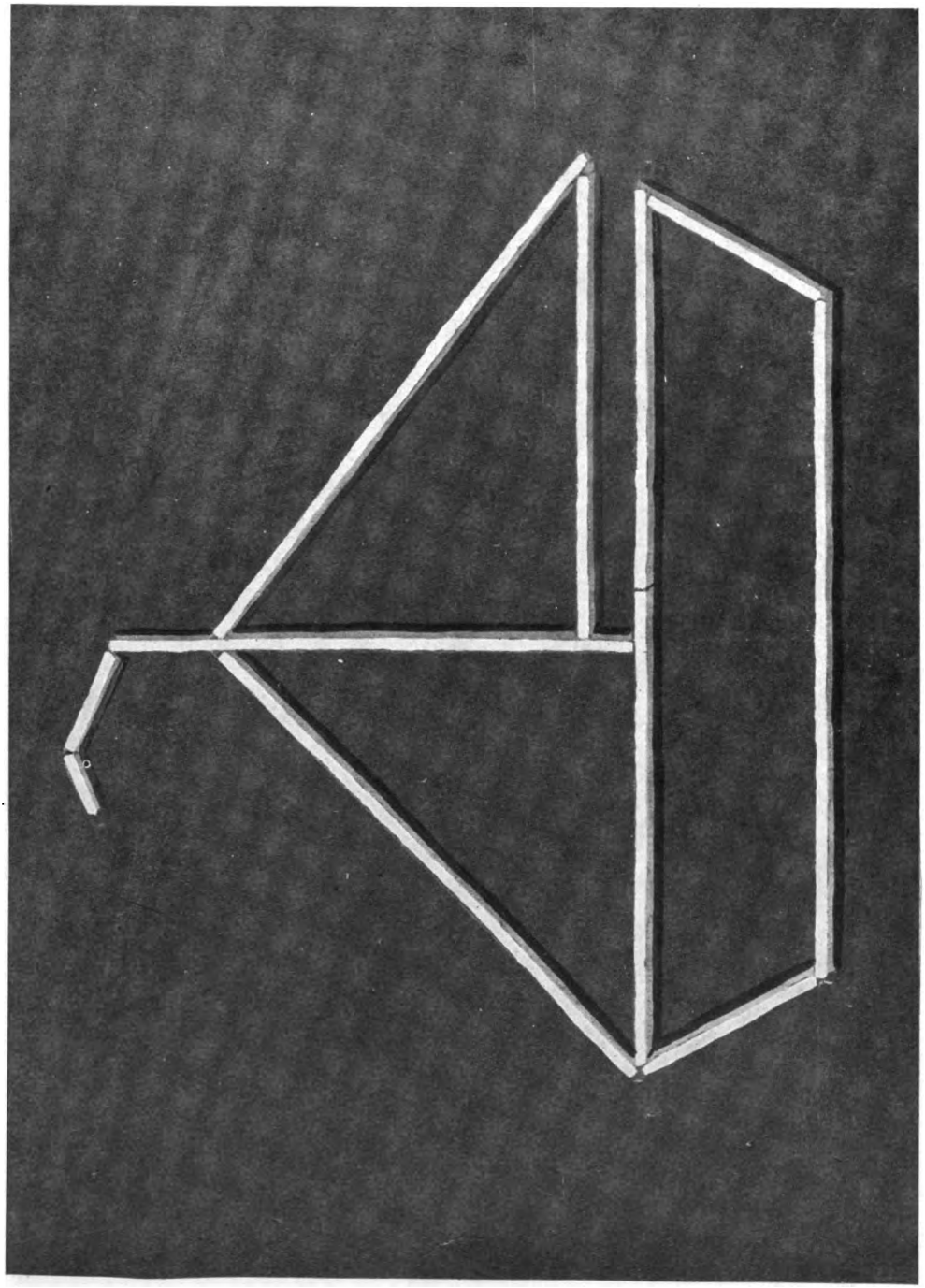

STICK LAYING.

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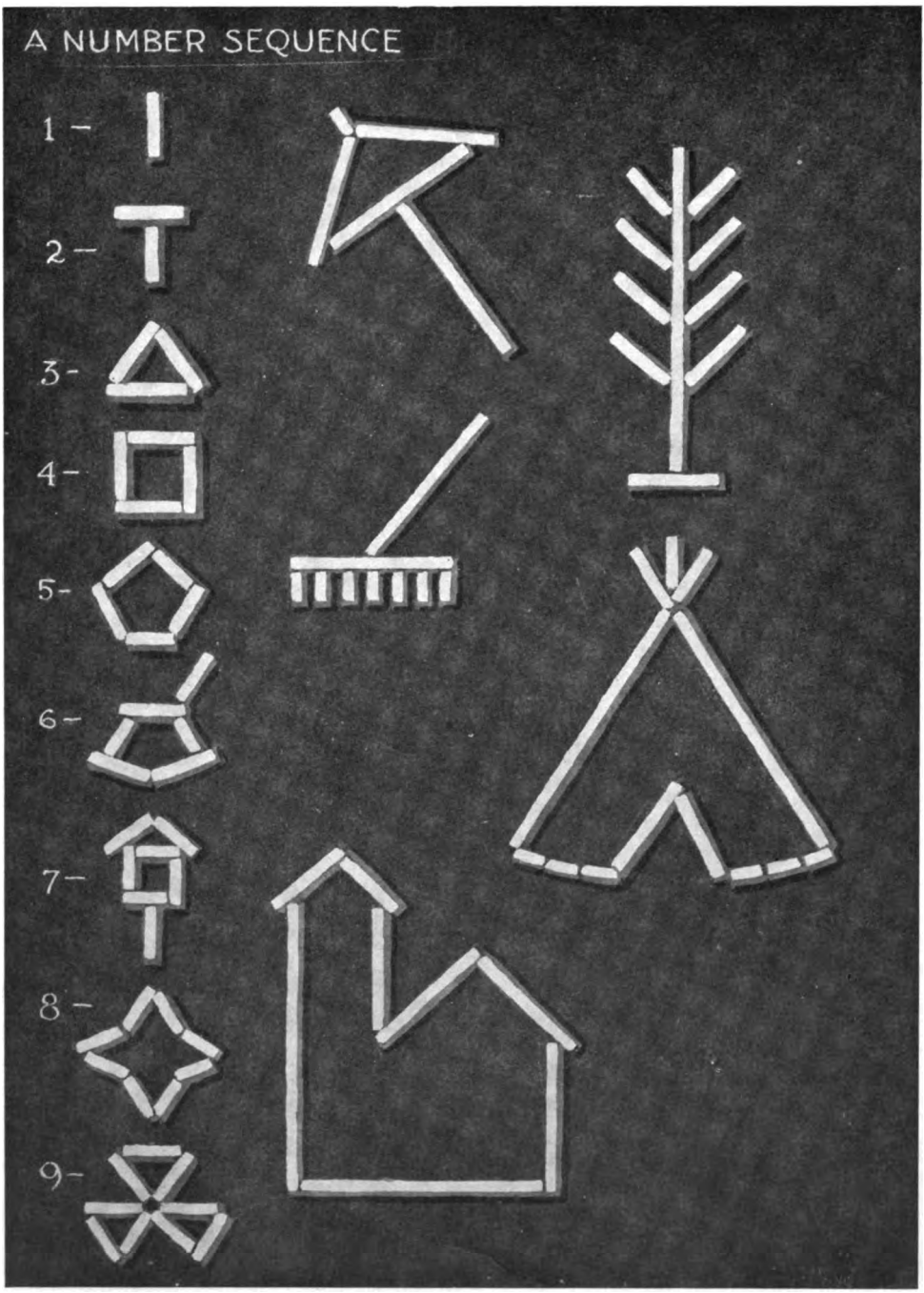

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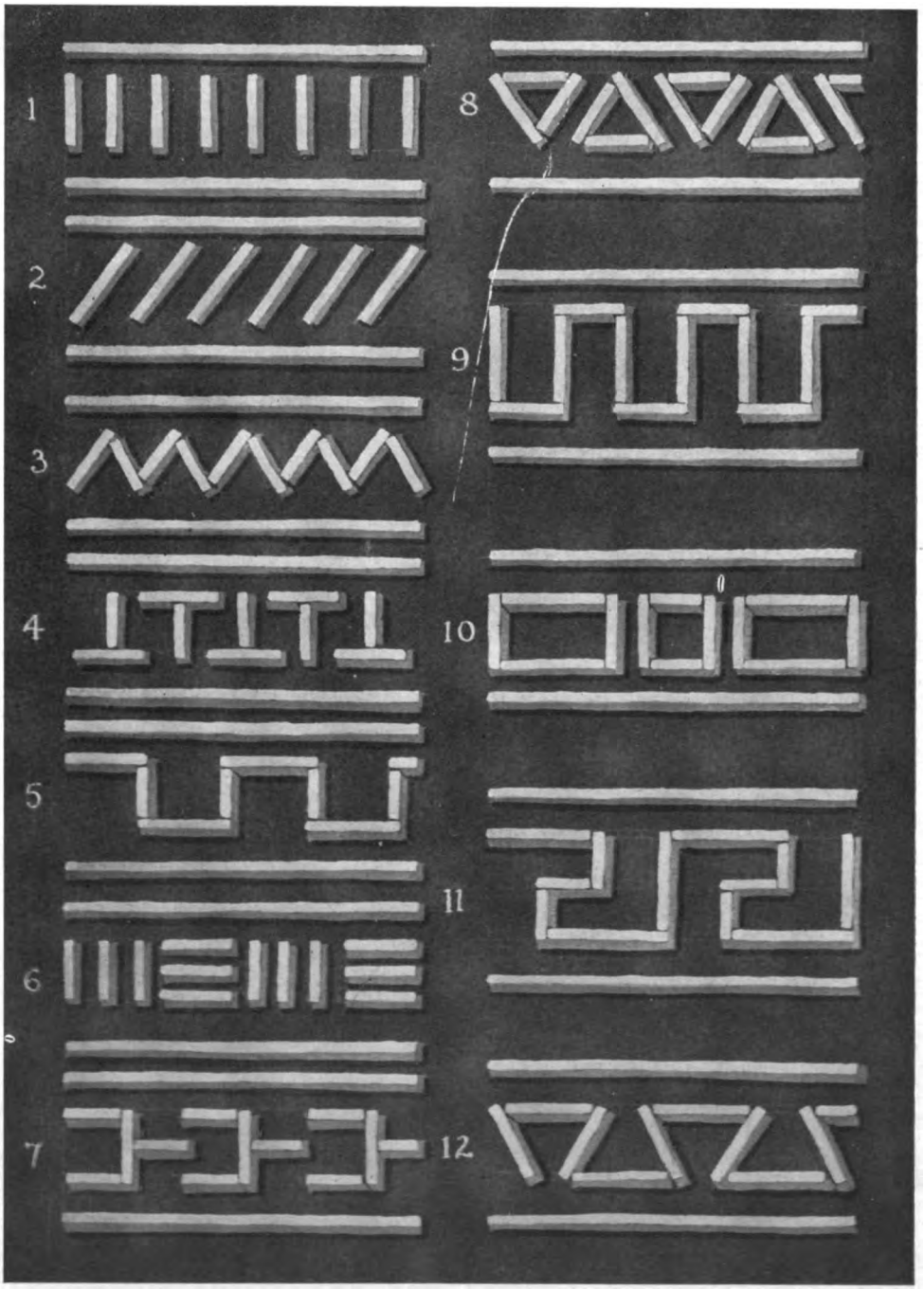

STICK LAYING—BORDERS

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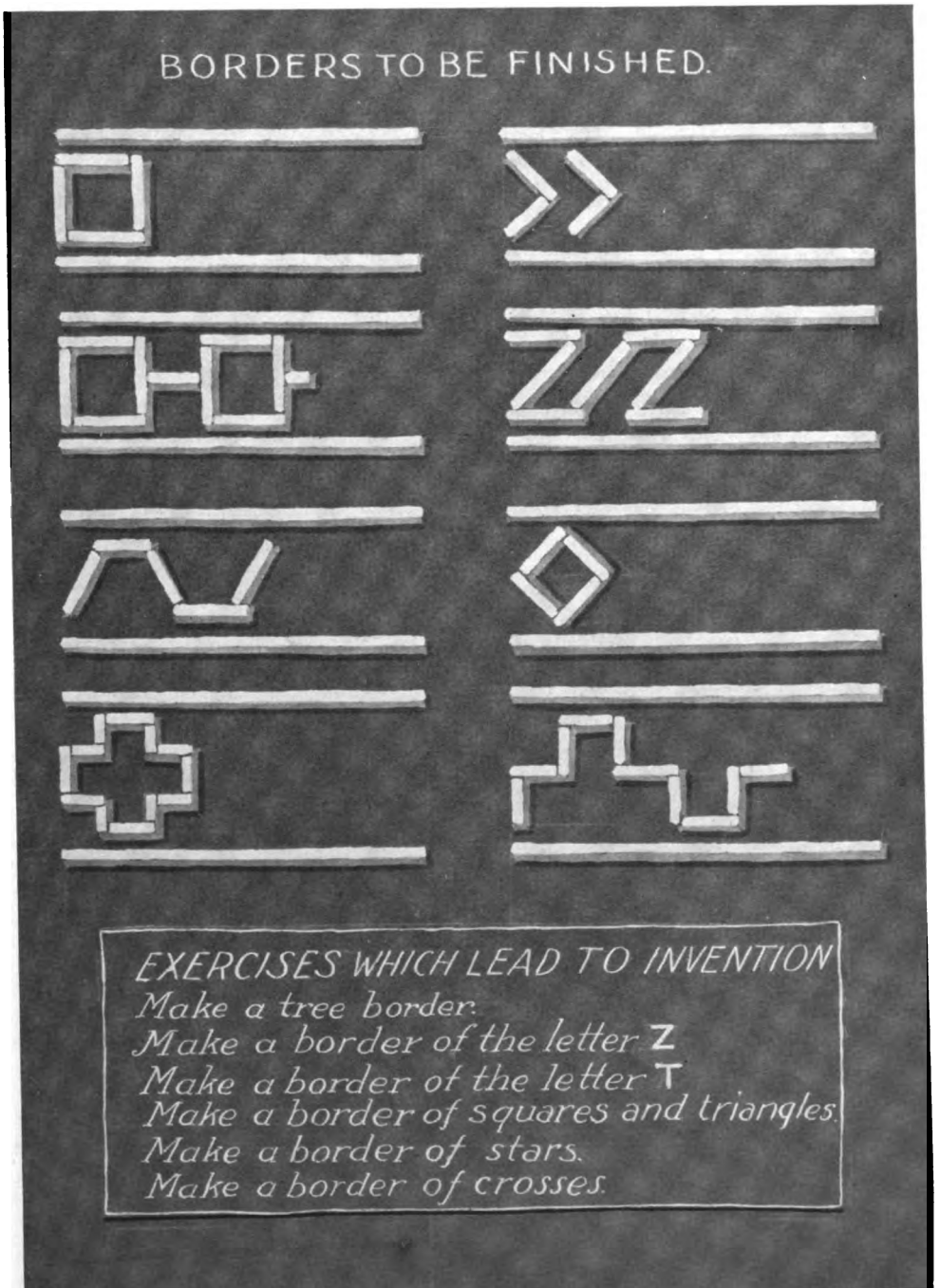

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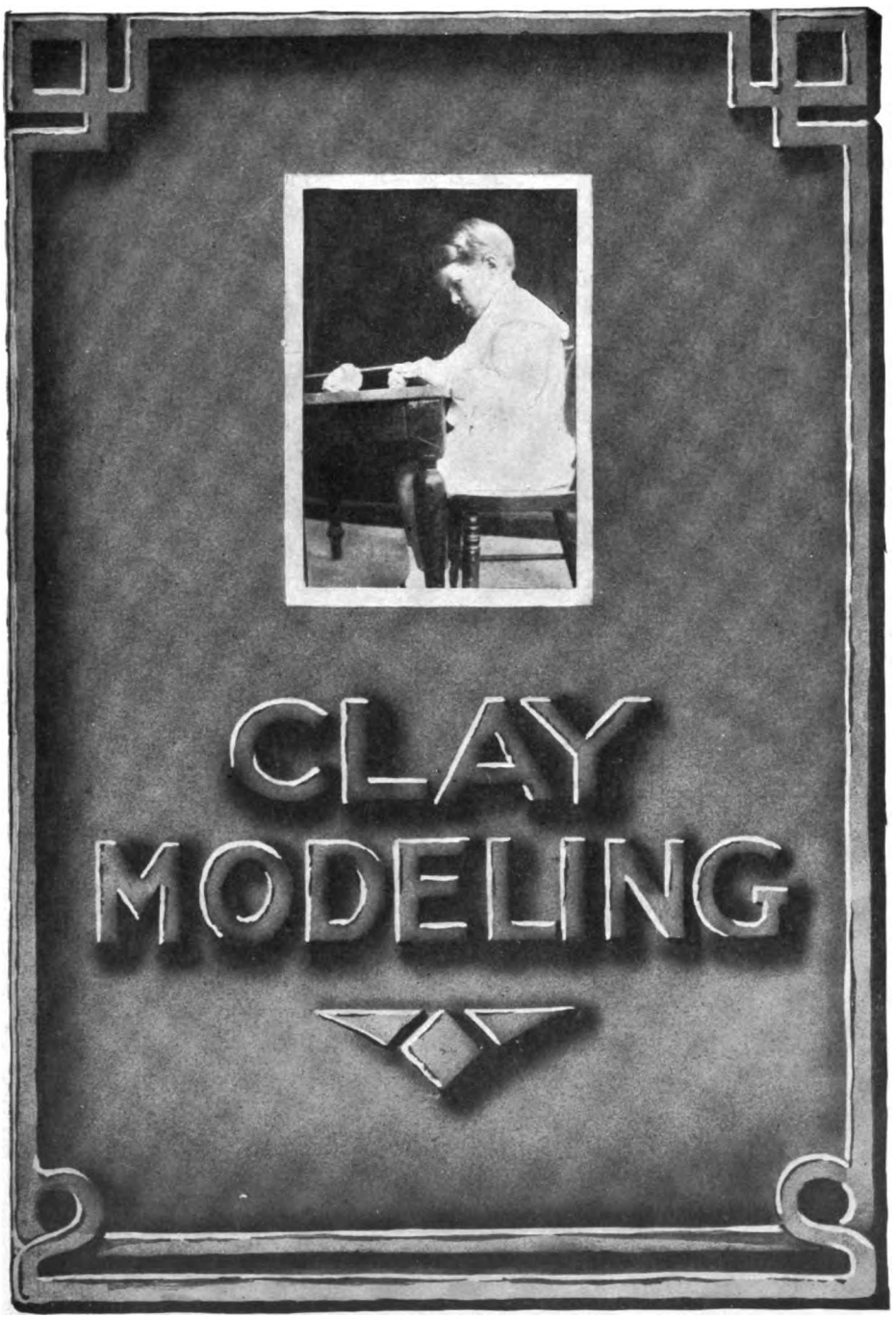

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Reflect that the student will learn more by one hour of manual labor than he will retain by a whole day's verbal instruction.

The things themselves are the best explanative.—Rousseau.

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CLAY MODELING

There is no other occupation that gives quite so much pleasure as clay modeling, and there is no better finger training. Not only does this work strengthen and educate the hand, but it necessitates observation of the smallest details,—thus it leads to seeing intelligently.

Clay modeling is excellent for individual seat work, as well as for class work. After a preliminary lesson in which it is shown that it is with the fingers rather than with the palms of the hands the work must be done, the clay, and, whenever possible, the object, may be given to the pupils while the teacher has other classes. This is not merely "busy-work"; it is more than "busy-work," for it is a form of expression through material things.

The results will be crude. It is not a lesson in fine art, but the desired result will be attained if it has opened the eyes of the child to the details of the object before him, and if he has expressed his image of it by means of his hands. Notwithstanding a somewhat prevalent opinion to the contrary, this material is neither troublesome, nor, as is ofttimes stated, "mussy," if properly cared for. If a good quality of clay is used, it is clean, and requires but a few minutes' care after each time it is used.

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THE CARE OF THE CLAY

To prepare it for use for the first time, place the dry clay or clay flour in a cloth sack and immerse in water until the flour is wet thoroughly. Put the clay, still in the sack, away in a stone crock or covered tin pail over night. If, on the next day, it is too sticky to knead, leave it exposed to the air for a few hours. It should then be kneaded into large lumps, placed again in the sack, slightly dampened, left over night in the jar, when it will be ready for use.

After the clay has been used, the models should be kneaded into lumps again, placed in a freshly dampened sack, put away in a covered jar, and it is ready for use the next day or the next week.

If at any time the clay becomes too moist or sticky, exposure to the air will remedy this, while wetting the sack will be equally effective if it becomes too dry. In the right condition, clay will not stick to the fingers, which indicates that it is too soft; or crack while using, which shows that it is too hard. *Never wet the clay;* moisten it by wrapping it in a damp cloth.

It is more sanitary to keep each individual's clay separate. To do this, a small cup with an improvised cover, or a jelly glass with a top, can be supplied by each child. By the use of these a well-founded objection to the use of clay is overcome. Not only is this plan better from a sanitary point of view, but it will be found that the clay is more easily cared for in this way.

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After the class has finished modeling, pass among them, selecting two or three of the best forms to be saved. Give new clay from a reserve supply, which should be kept on hand, to those whose work was taken, then let each child wrap his own clay in a freshly dampened cloth, and put it away in his own glass. Have the glasses collected and put away by rows or classes.

We are getting away from the old idea that all the class must be doing the same thing at the same time. With the clay in individual glasses, in an easily accessible place, it will ofttimes be convenient for the teacher to say to some unoccupied child, "If you have finished your work, you may get your clay."

A square of oilcloth may be used to protect the desk, and has the advantage of being noiseless and easily handled.

Amount.—Five pounds of clay flour are enough for a class of twelve for a year.

A FEW GENERAL DIRECTIONS

The accompanying cuts do not outline a specific course. It is left to the teacher to govern her work by the material she has at hand, and the aptitude of her pupils.

Give this work a local interest by modeling the fruits, vegetables, leaves, and nuts which grow in the vicinity; by reproducing either the reading les-

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son, or some feature connected with it; or by relating it to the nature study or drawing whenever possible.

In making fruits with stems, a "pinch" of clay should be set aside for the stem. By rolling this small piece between the thumb and finger, a slender stem is made. A hole is then made in the fruit with the clay knife or pencil into which the stem is inserted, care being taken to work the model at the base of the stem in order to make it secure.

In joining two surfaces, as the handle to the cup, prick lightly the parts to be joined with the clay knife or point of pencil, making rough surfaces, which join more readily.

CLAY KNIVES

For the cup, a cylinder is made, a small piece is cut out with the clay knife, then hollow it out with the thumbs, keeping the walls straight.

BAS-RELIEF OR FLAT MODELING

Flat modeling is very simple and very fascinating work. Drawing in the higher grades may be varied and made more interesting by the introduction of this work.

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A tile about one inch thick is made by working the clay bit by bit into the size and shape required. With this as a foundation, using additional clay, model flat objects in bas-relief. When modeling animal forms they should be built on a tile for the foundation or pedestal.

Clay is an excellent medium for imaginative work. Suggest a country scene, recall a mental picture or a familiar story, and let the class work it out with clay on a tile.

Clay will be found useful and effective in representing Indian, Esquimau, early Pilgrim, and other race history studies. As this requires more than one individual's portion of clay, it is well to allow several to work together on such a plan.

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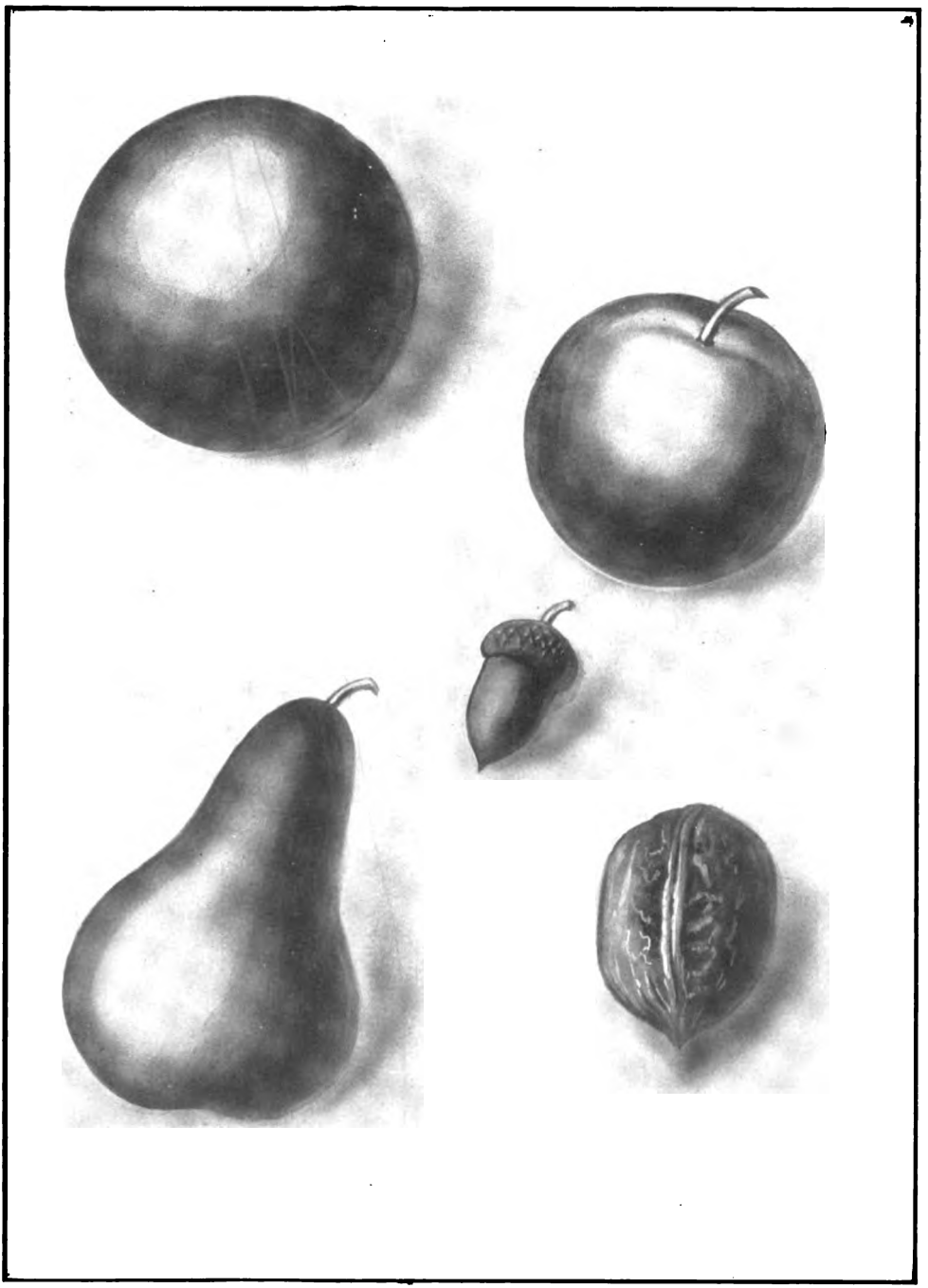

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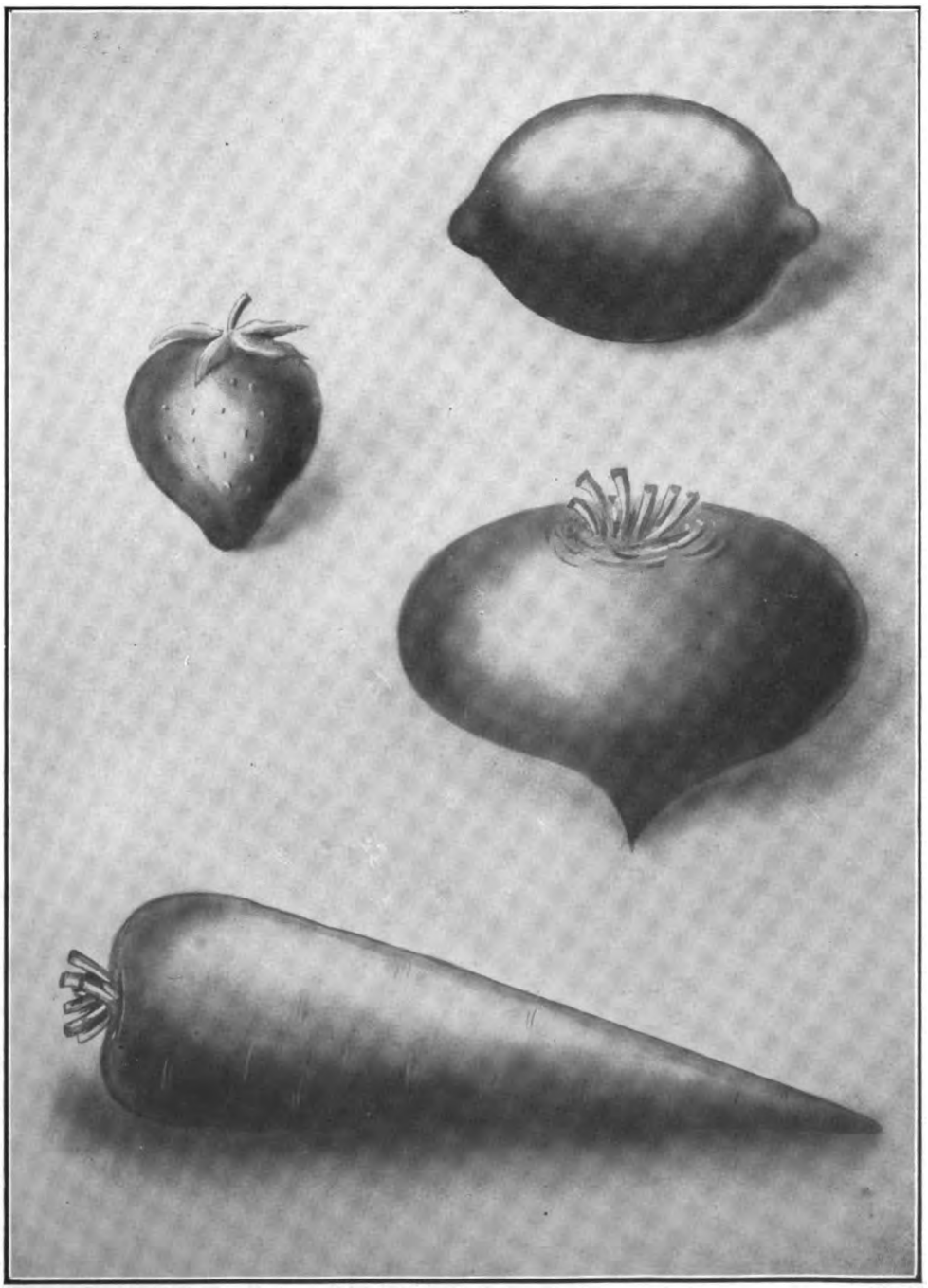

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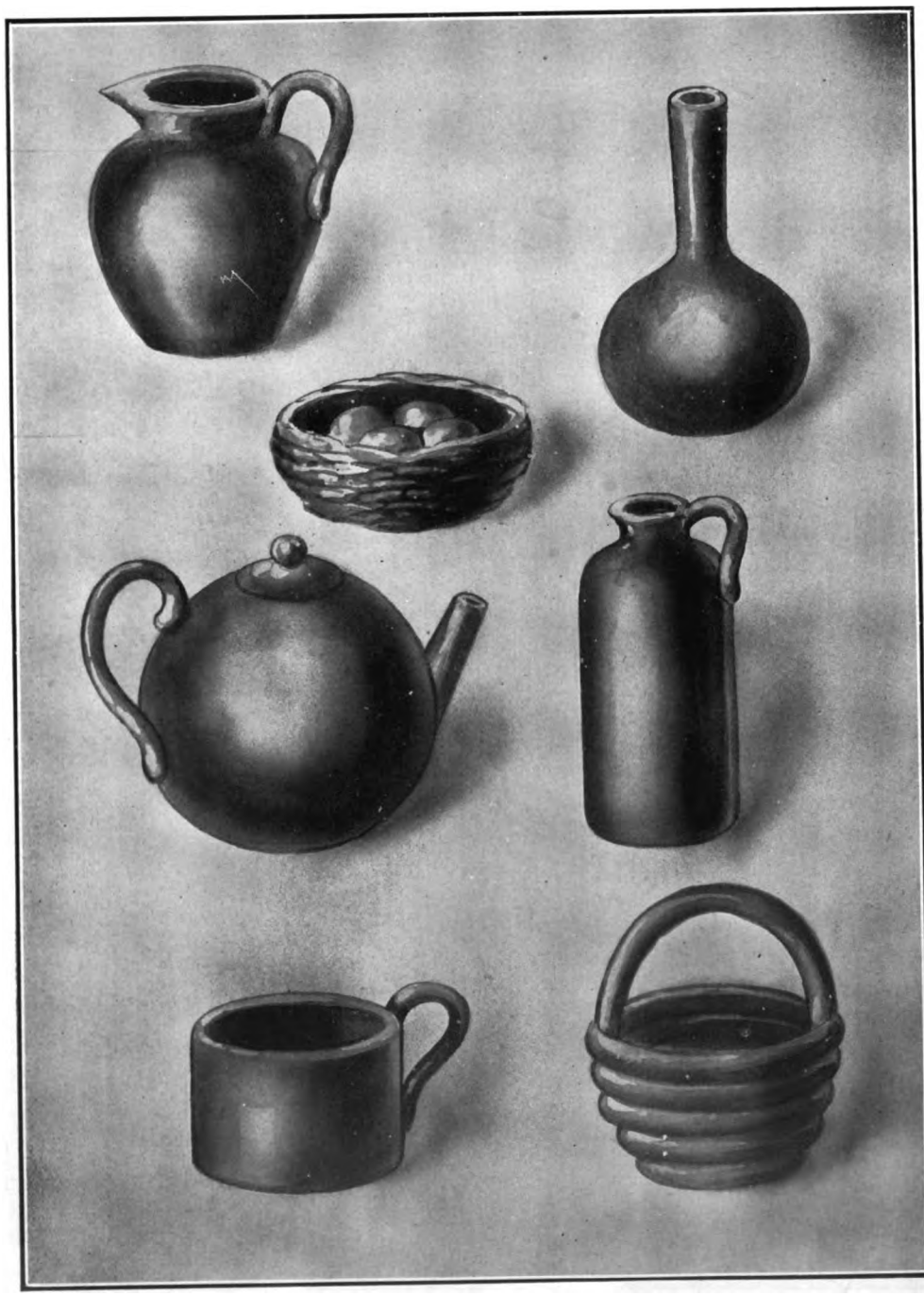

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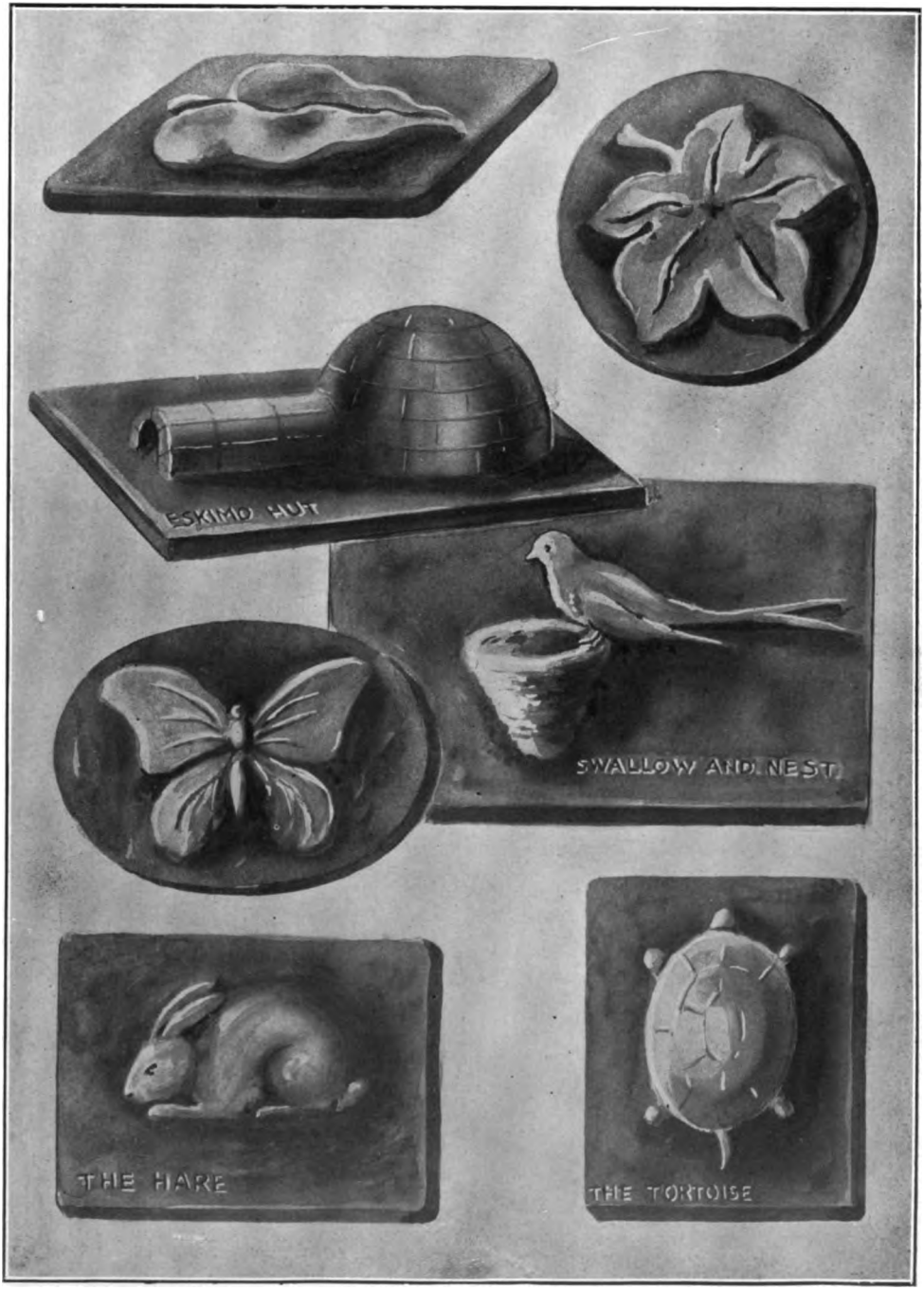

CLAY MODELING

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EXPLANATORY NOTE

We regret that we were unable to procure printing inks that would exactly express the purer color tones of the "Bradley Color Scheme," on which the color work in this book is based. We believe, however, that the close approximations obtained will not materially lessen the value of these exercises for the early development of the color-sense in children, which they are intended to accomplish.

H. O. P.

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SEWING

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The child must and will use his heart, hand and head. The longing for activity exists in his nature, and, if not developed in the right channel, will be developed in the opposite direction.—Mme. Kraus-Boelte.

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SEWING

Sewing is another occupation that is a boon to the busy teacher of several grades.

Give a child a sewing card, a big-eyed needle and a bit of colored thread, and he is busily and profitably occupied as long as may be desirable.

"But of what use—this putting the needle in one side and out of the other?" some one may ask. In this occupation deftness and delicacy of touch and finger control are acquired,—"hand control leads to self-control." The close attention required here develops the power of concentration so necessary in other lines of work.

Sewing, it should be remembered, is a means of form and color study as well as hand training. Forms of life which can be represented by long stitches and not lose in effect thereby, are not only pleasing to the child, but are a means of teaching and observing form and color in nature as well. This affords also opportunity for imparting a familiar knowledge of form by sewing squares, triangles, circles, and other regular forms.

The muscular action will at first monopolize the whole attention of the child. In his interest and anxiety to put the needle in the exact hole in which it belongs, his tongue and facial muscles will work in

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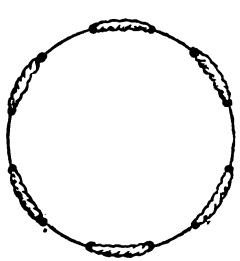
sympathy, but his satisfaction in the completed card must not be marred by crude forms or color discords.

Circular lines should be sewed with large worsted, which adapts itself kindly to curves.

In matching colors, when sewing fruits or flowers, color tones should be softened, or jarring and disturbing combinations will result. It should be remembered that lights and shadows are constantly playing on and mellowing nature's color harmonies, which must be taken into consideration when perpetuating the same in embroidery or painting. The point in view should not be, "Does this match exactly this leaf or that flower?" but, "Do these colors make a harmonious whole?"

The study of borders which was introduced in the chapter on stick laying can be continued and developed further in sewing.

When forms of life are sewed, they may be colored with water-colors or crayons, so that they appear in mass—a hard outline inclosing a white space means nothing to a child.



Blunt-pointed tapestry needles, No. 18, with zephyr or silk-finish crochet cotton, are the accessories. At first, have the needles threaded and threads knotted ready for use. Let these two operations be the object of a few minutes' lesson at some future time.

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The outline of the form is gone over twice. The first time each alternate stitch is taken, as in the accompanying diagram. The second time the "gates are closed," making a continuous outline.

Sewing should always be a lesson in neatness; no careless work should be allowed; the wrong side of the card should appear as neat as the right side.

The most desirable cards are those with simple forms and few lines, having large perforations made by removing a small disk. The strain on the eyes caused by the pricked cards so full of detail, formerly used, is thus removed. In selecting cards for beginners those having an unbroken or continuous outline should be chosen.

Amount of Material.—This varies with the aptitude of the class and the cards used. Eight cards of an average amount of detail are usually enough for the average child working once a week from the opening of the fall term till Christmas.

Have patience with mistakes at first, remembering how difficult it is to handle such a small implement as a needle and watch the pattern and keep your thread from tangling,—that is, if you are only five or six years old.

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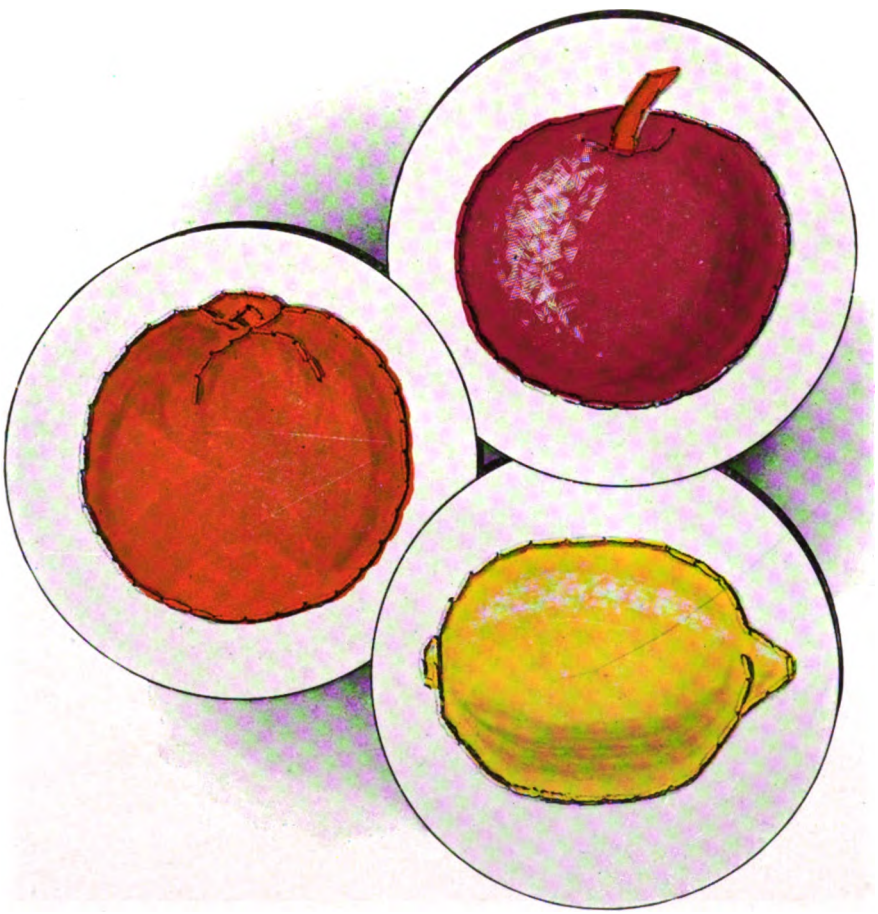

A COLOR SEQUENCE IN SEWING—RED, ORANGE, YELLOW

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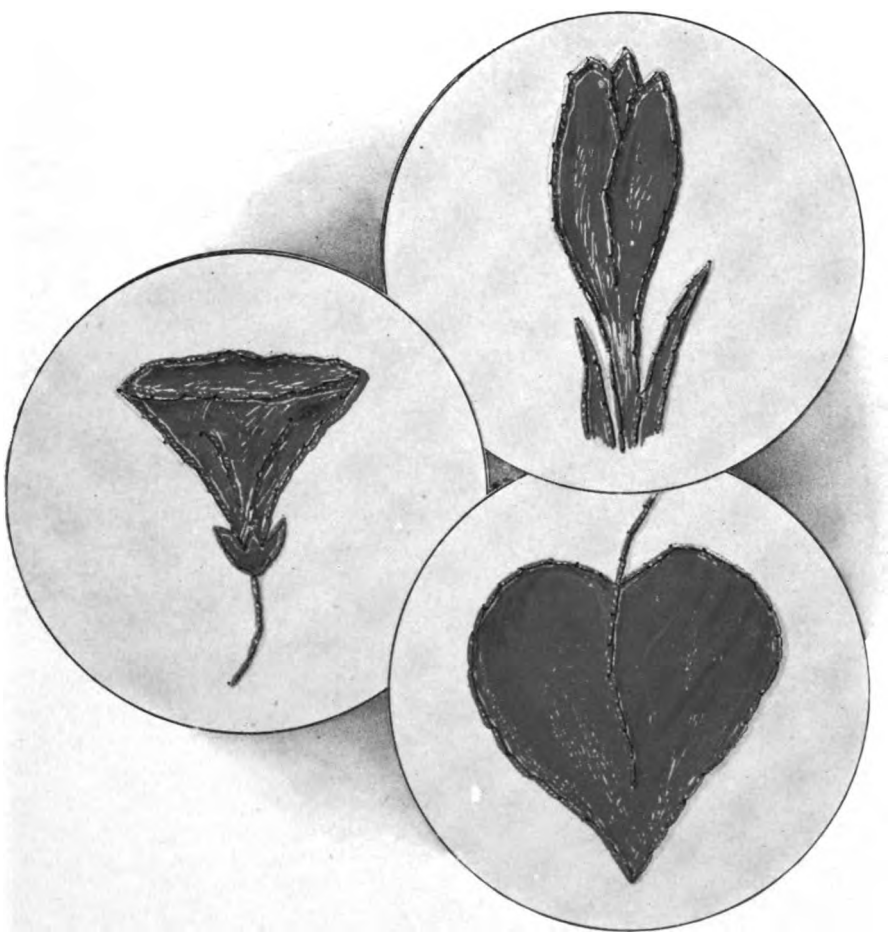

A COLOR SEQUENCE IN SEWING — GREEN, BLUE, VIOLET

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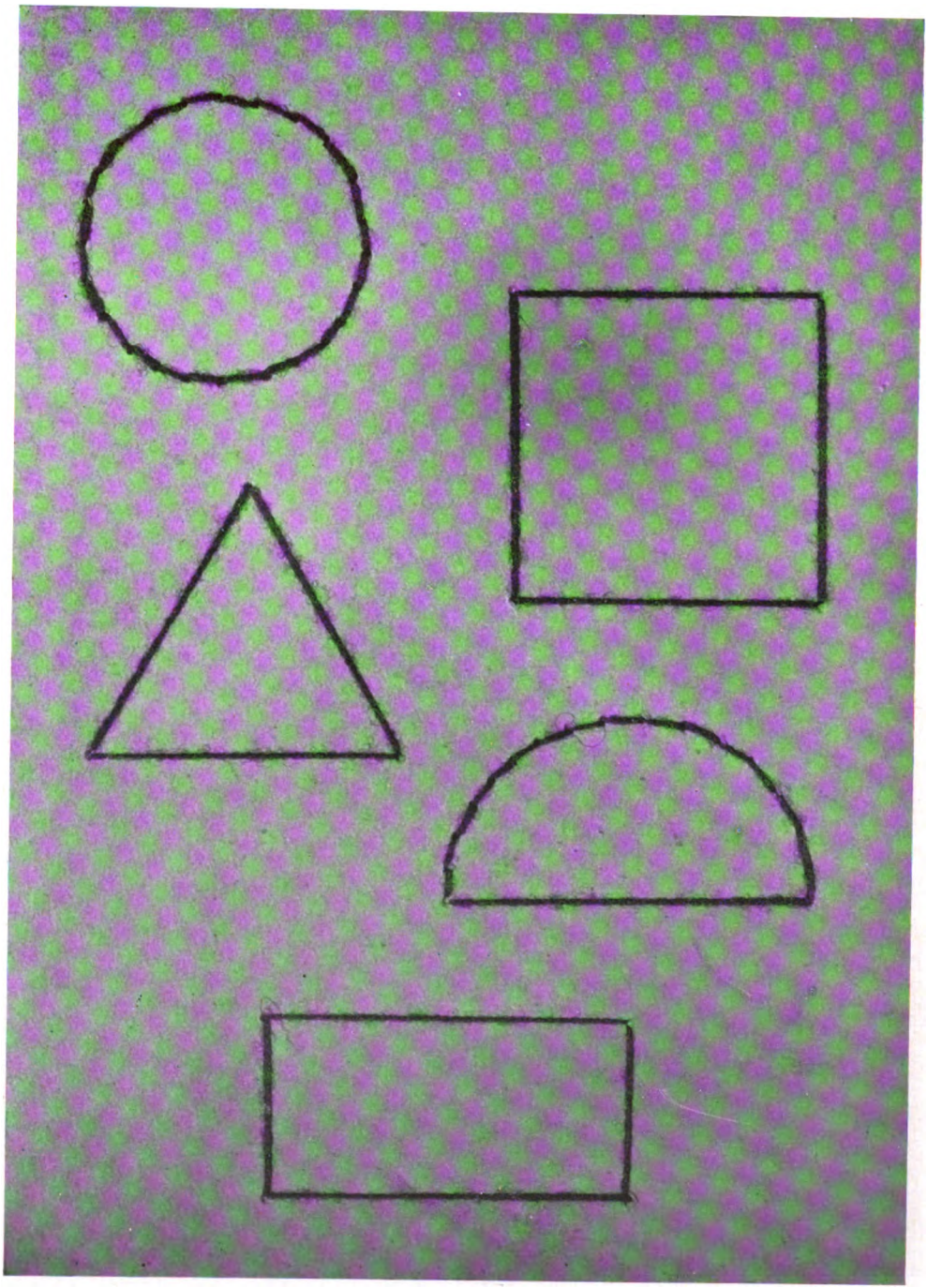

SEWING

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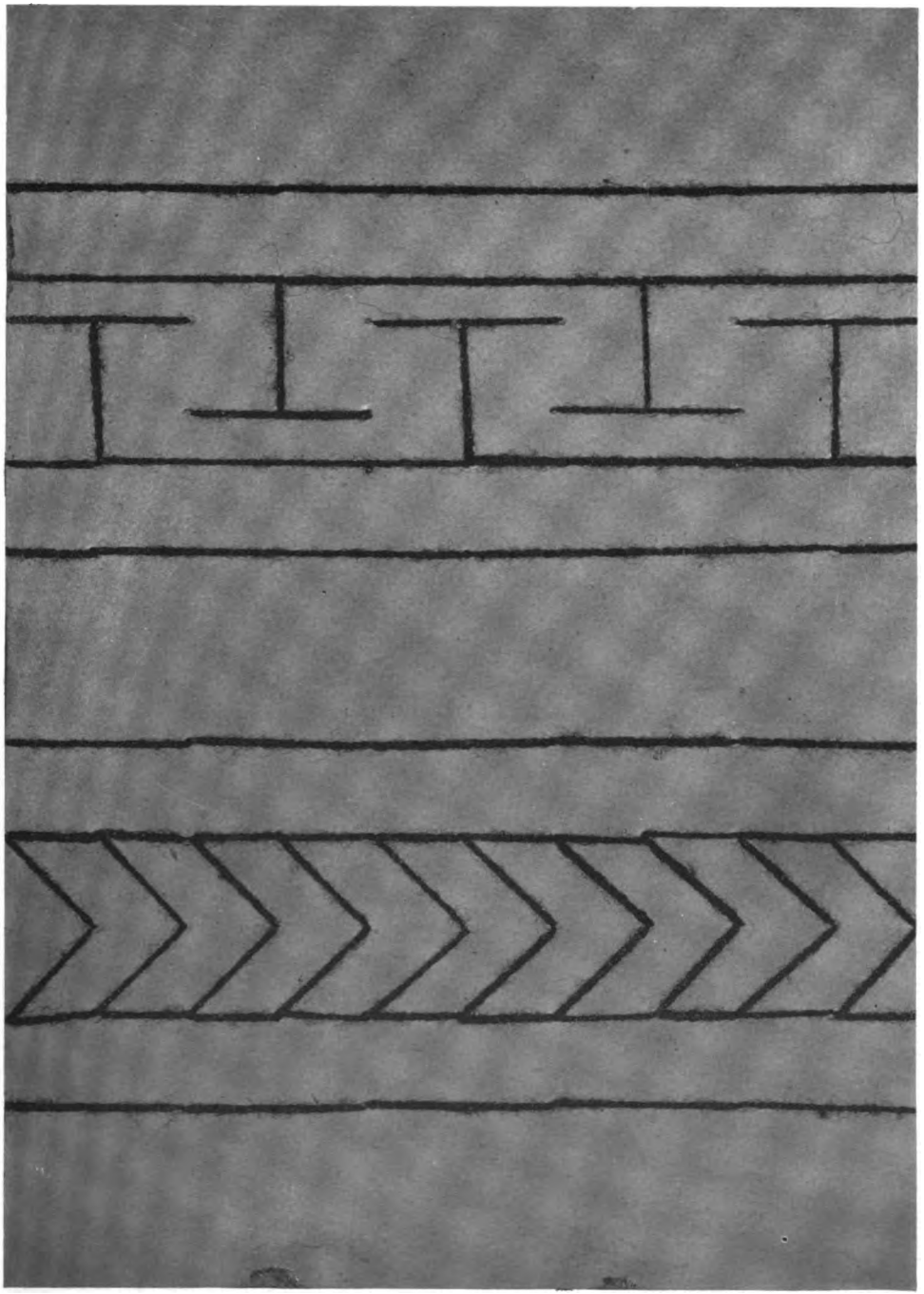

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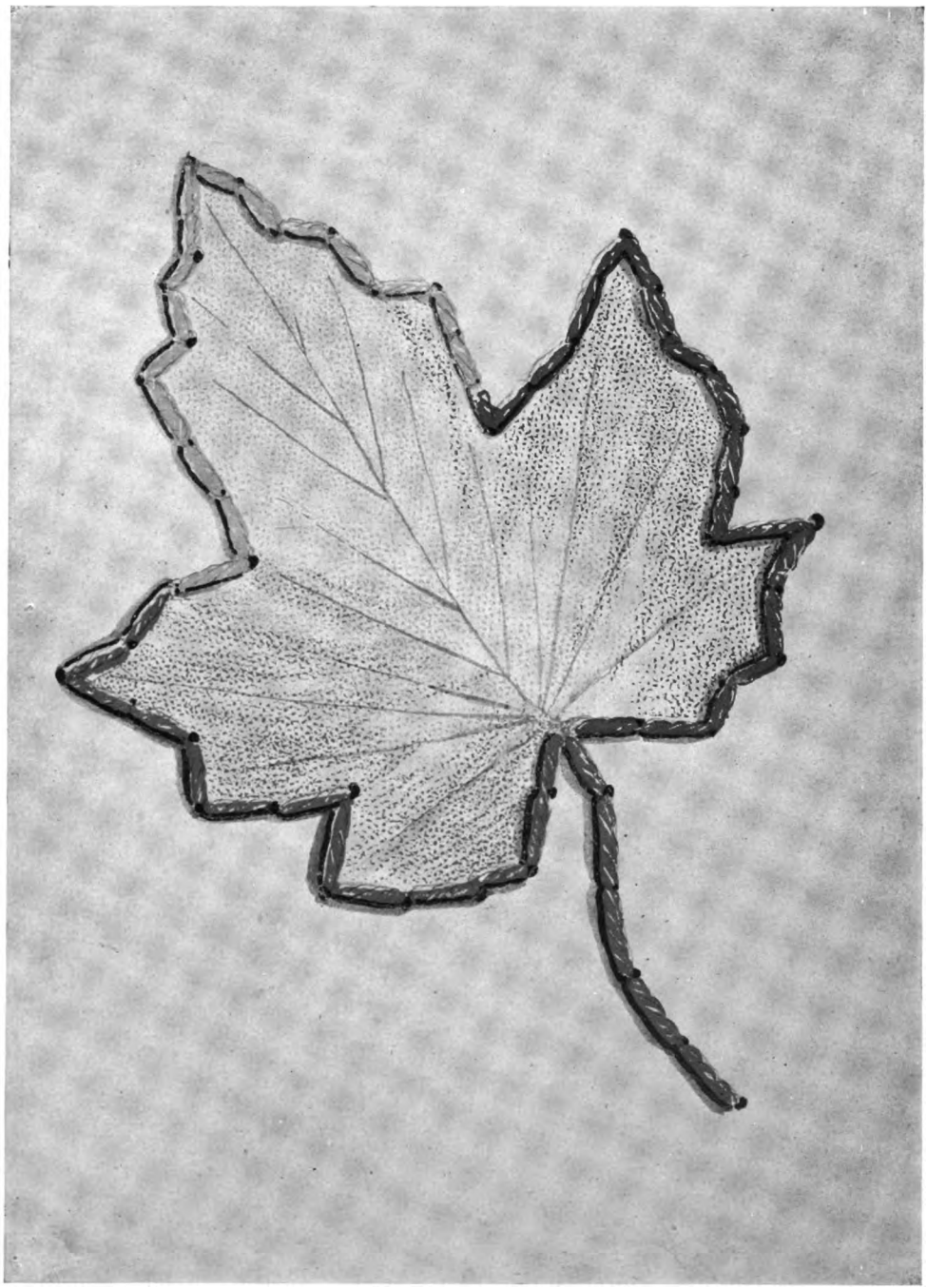

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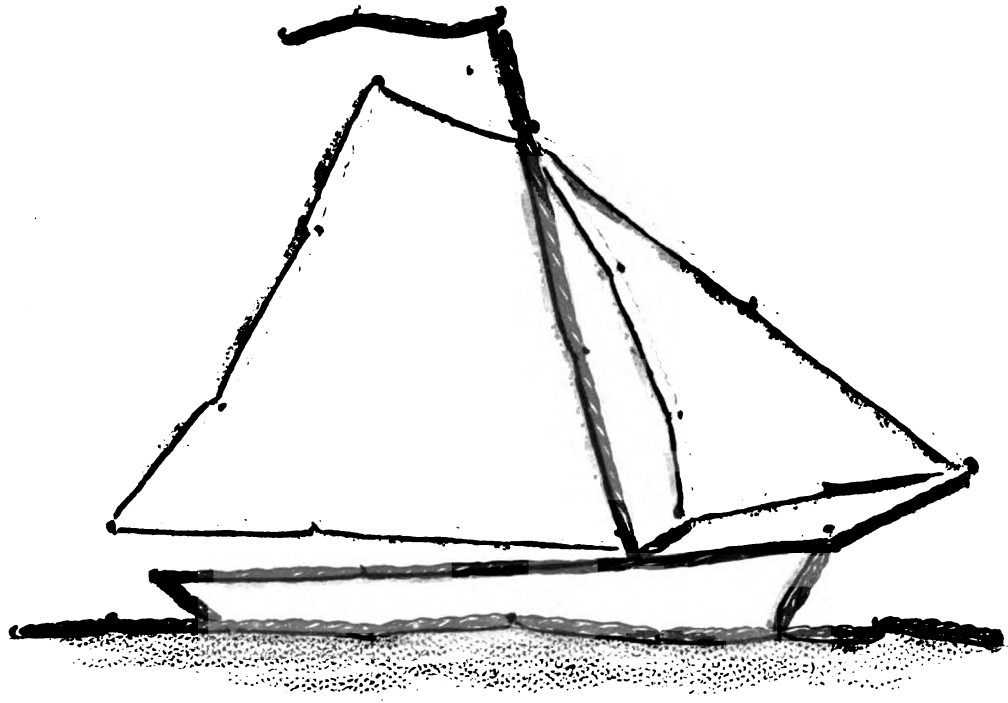

SEWING

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FORM and COLOR

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Frequent complaint is made of over-pressure in schools, but it is not work which causes over-fatigue so much as lack of interest and lack of conspicuous progress. The best way to diminish the strain is to increase interest, attractiveness, and the sense of achievement and growth.—Eliot.

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FORM AND COLOR

The materials for this course are colored paper, scissors, tablets, parquetry forms, paste, and a plentiful supply of white practice paper for free-hand cutting. Water-colors or crayons may be used for coloring and decorating forms which have been cut from white paper.

Parquetry is the name given to colored papers obtainable in small geometrical forms for perpetuating design work with tablets. By the use of these in making borders, rosettes, and various other designs, the eye and hand are trained, symmetry is developed, and by working with the forms themselves an intimate knowledge of form is acquired.

Color and form are so closely associated that the study of one naturally embraces the study of the other.

The study of color is both important and practical. It is as necessary that the eye should be trained to discriminate to a nicety between color-tones, and be able to make pleasing combinations of color, as that the ear should discriminate between sounds and know harmony from discord in music.

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While some people are born with an appreciative eye, or soul, for the harmonies of nature's colors with their iridescent lights and shades, there are many more who pass them by, not seeing them, and stand helplessly dumb before masterpieces of art. It is not necessary here to enter into platitudes on the influence of this appreciation of the beauty about us, for in a more or less definite way we all believe it has an elevating and uplifting influence. So let those who have themselves walked in darkness be not afraid of their own blindness, but with, and as one of, the children seek the light.

To demonstrate the practicality of the study of color, not only its importance to milliners, dressmakers, florists, furniture dealers, house decorators, and many other trades needs be cited, but its influence in the home and in dress is so great that, consciously or unconsciously, it affects every individual's happiness in a greater or less degree.

The Six Standard Colors.—The solar spectrum is divided into the following six colors called standards, —red, orange, yellow, green, blue and violet.

The recognition of these with their names constitutes the principal part of the color work for the first year. The recognition of these means a correct mental concept of each standard, formed by handling and working with the purest colors obtainable, after which the tints and shades and hues will group them-

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selves about these absorbed images of the standards in martial order.

Color may be presented by making a projection of the solar spectrum in the schoolroom by means of a glass prism. This little "sun-fairy" is a never-ending source of wonder and delight to the little ones. Let them pick out the colors they know and learn the names of those with which they are unfamiliar. Make a chart of the six standards for the schoolroom, and let each child make one for himself.

In the scale of any one color, the tones lighter than the standard are called tints, those darker than the standard are called shades. Children should early learn to use these two terms, tint and shade, correctly. To this end the "families" of some of the colors should be presented. The "red family," for instance, consists of the standard red, its shade, and its tint. Many applications of these combinations can be made in rosettes, borders, tile patterns, etc. Call attention to the color scales in nature, how the light makes tints, and the shadow shades, on leaves, fruits and flowers.

A tint and a shade should be added to each color on the color chart. A collection of bits of cloth, glass, buttons, tablets, colored paper, etc., may be made for matching and comparing with the chart. Give each child the six standards with a tint and a shade of each in parquetry forms and let him arrange a chart similar to the one shown on page 67.

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A WORD ON COLOR HARMONIES

A *hue* is a spectrum color, it may be red, it may be orange, or it may be applied to the colors which lie between these two in the spectrum—orange-red or red-orange. The term standard is used to designate the *pure* colors, red, orange, yellow, green, blue, violet; by hues we include not only the standards, but all the colors formed by the mixture of pure colors. The term is usually applied to the colors found between the standards in the color spectrum called "intermediate hues." In the composition of the pure hues there is no white, black, or gray, so that though a scale may be formed of each hue with its tints and shades, and thus we have tints and shades of a hue, yet the term "hue" cannot be applied correctly to a tint or a shade.

A scale of color is that color arranged in steps or degrees from a shade to the standard and from the standard to the corresponding tint. Each color-note in a scale is called a tone. A scale may be made up of but three tones or it may be made up of an indefinite number, according to the gradation between adjacent tones.

Combinations of the standard colors are usually harsh or crude if the pure colors are used, though the tints or shades of one may be successfully combined with those of another.

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A *dominant harmony* is a harmony made from different tones of one scale. Imagine a scale of the standard yellow, graded from a pale tint at the top to a deep shade at the bottom; a picture or design made up of various yellows from this scale is a dominant harmony in yellow. In the study of color with children it is a wise plan to keep them to dominant harmonies or combinations of grays with spectrum colors, else their lack of color judgment may lead to riotous and warring combinations.

Form as dealt with in this chapter treats only of surface forms. It is left to the teacher to develop the relation between these and the type solids.

Children should early learn to recognize and name the following forms,—circle, square, semicircle, triangle, and rectangle. This may be done by tracing the form from tablets, and cutting it, and by work with parquetry forms. The familiar knowledge and use of the names of these forms may be taught by dictation exercises with tablets, which may afterward be mounted in parquetry.

For example: Pass to each member of the class one square and four semicircles of parquetry forms, a square of mounting paper and paste.

Dictate as follows: Place the square in the center of the paper with one side (rather than one corner) toward the front. Before pasting, inspect the position of this square. If intricate patterns are to be

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mounted, a vertical line and a horizontal line through the center of the mounting sheet is advisable.

Place a semicircle at the left of the square, as near as possible without overlapping.

Place a semicircle at the right of the square.

Place a semicircle at the back of the square.

Place a semicircle at the front of the square.

Do not hesitate to show each step by means of larger tablets or blackboard diagram until the pupils are able to work from dictation alone.

In the foregoing exercises with parquetry forms it is assumed that one or more previous talks had been given upon these two forms, still the word, "semicircle," being an unfamiliar one, may not suggest the half circle until practical work with the form has been done.

For cutting quarterfoils, four-pointed stars, four-petaled flowers, fold the paper in halves, then double it into quarters, then once again diagonally into eighths, then cut half of the one fourth of the design, for instance, half of one point of the star, which is an oblique line, or half of one petal of the flower. When opened out the unit is repeated four times about the center.

An infinite number of original designs may be made by folding into eighths, then cutting free-hand designs of various shapes.

In the following exercises the type forms presented are to be traced from tablets, then cut and mounted.

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This is for form study and must not be confused with free-hand cutting. It will be noticed that the six standard colors are used in making these forms.

The designs in parquetry should first be made with tablets. In placing designs for borders, symmetry and balance are developed by placing the middle unit first, then working from it to each side.

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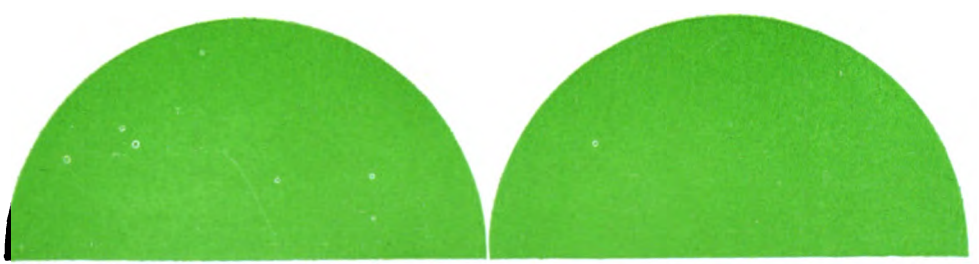

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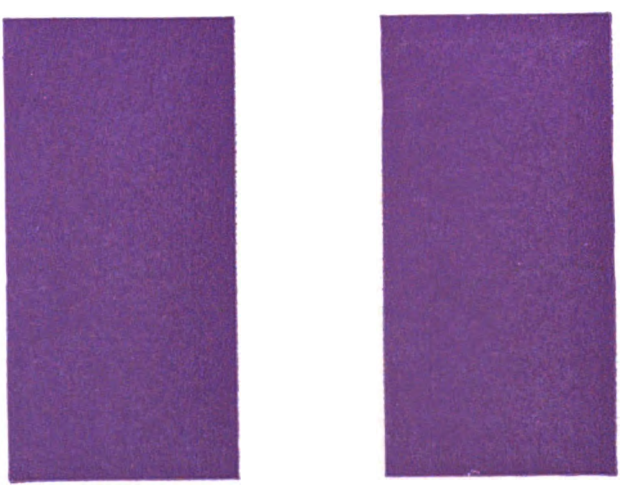

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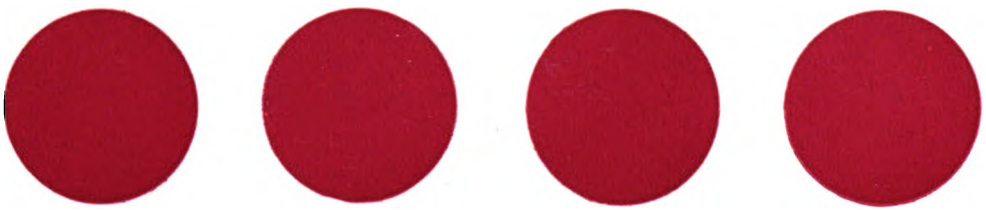

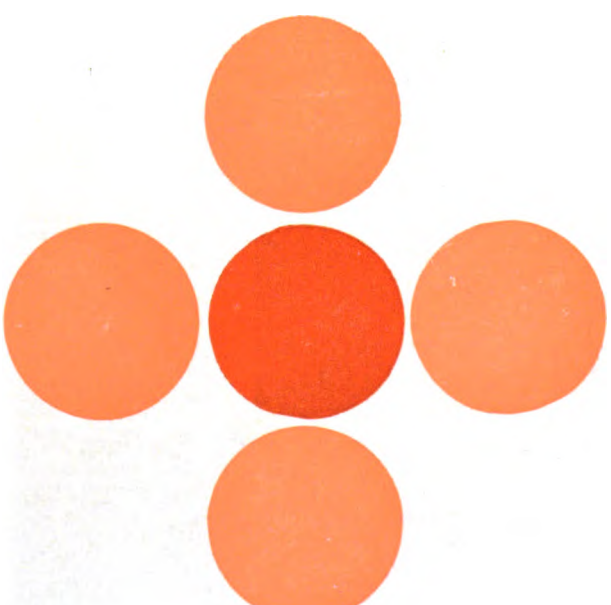

DESIGNS FOR PARQUETRY OR TABLETS

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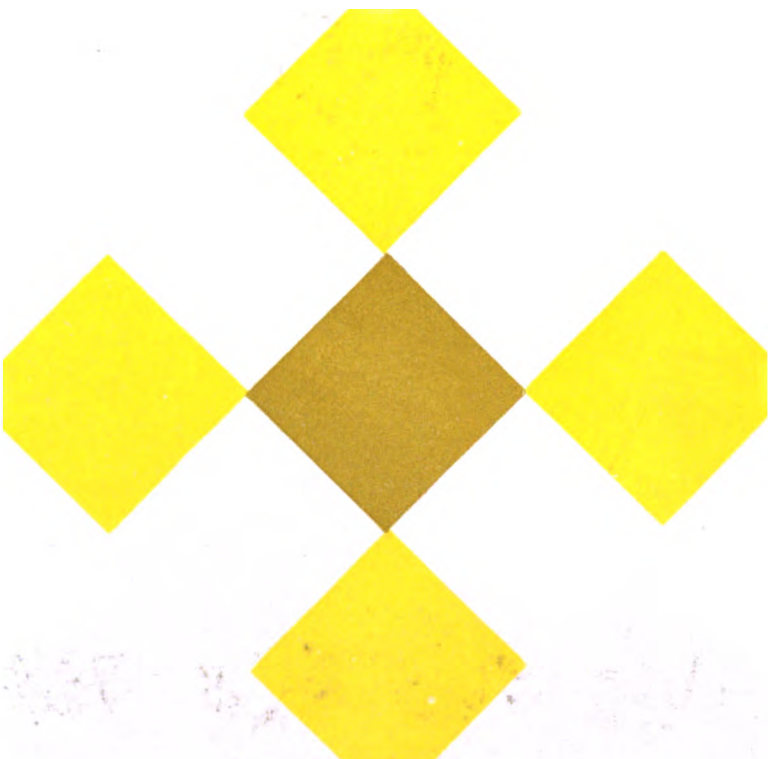

DESIGNS FOR PARQUETRY OR TABLETS

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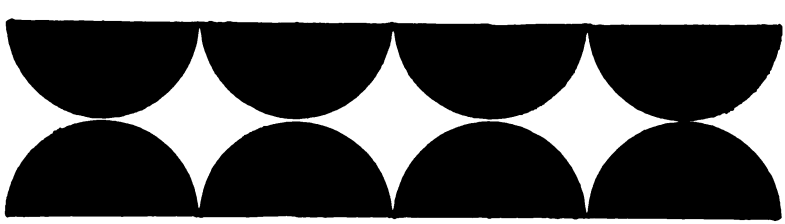

DESIGNS FOR PARQUETRY OR TABLETS

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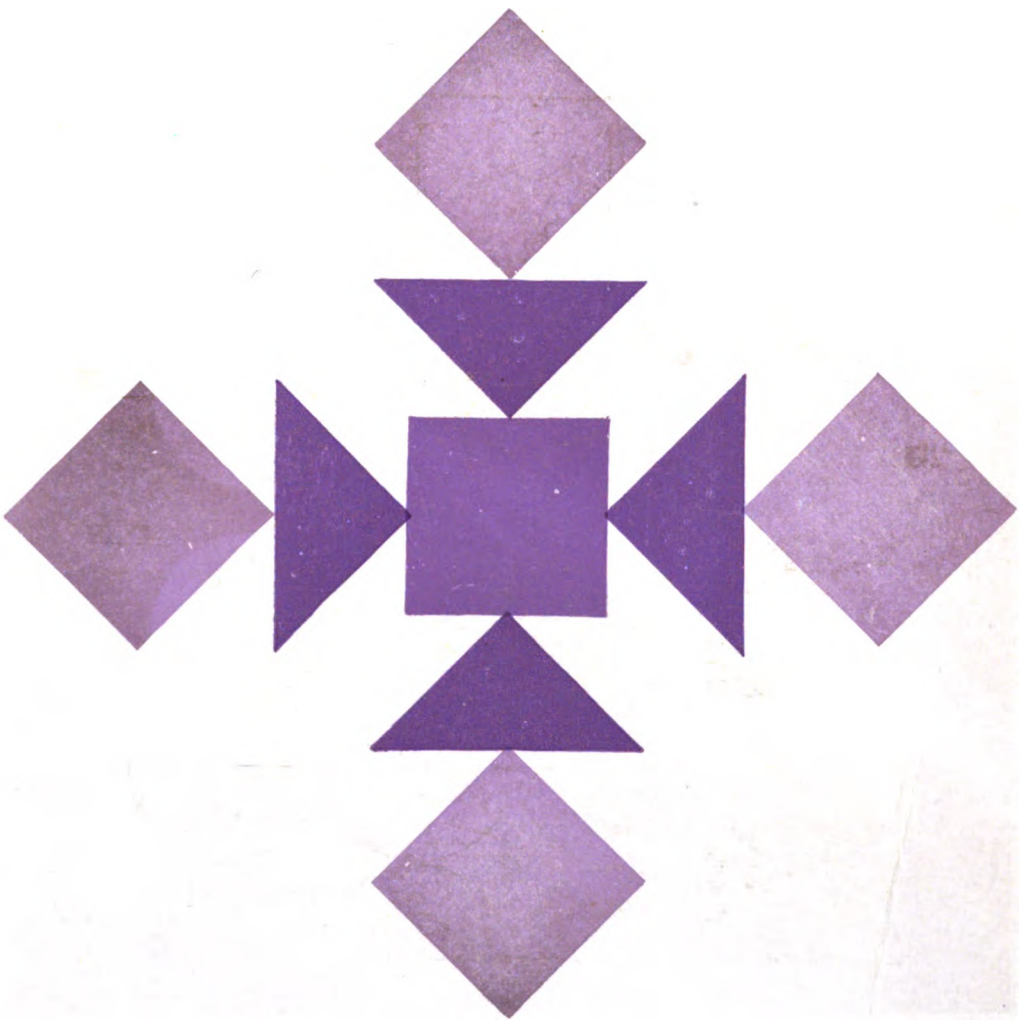

DESIGN FOR PARQUETRY OR TABLETS

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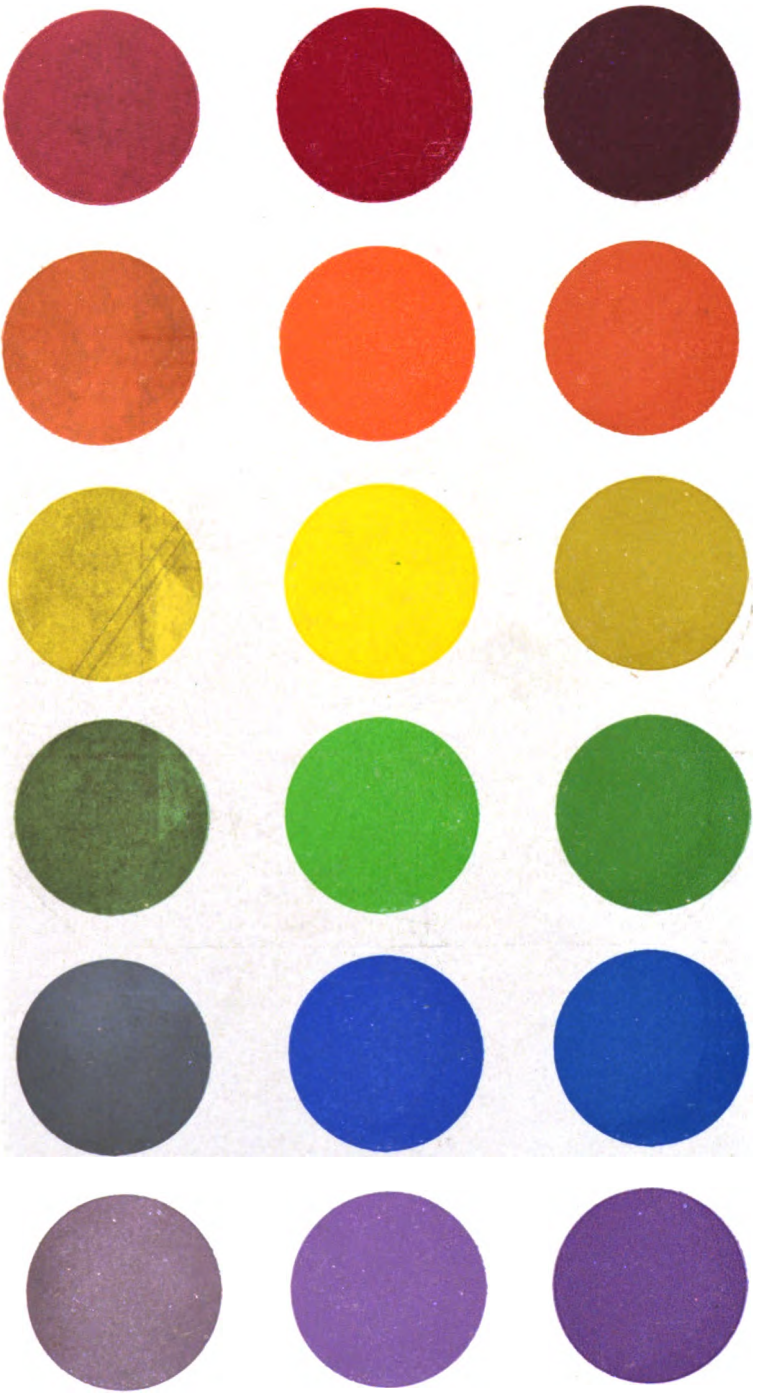

COLOR CHART SHOWING SIX STANDARDS WITH A TINT AND A SHADE OF EACH

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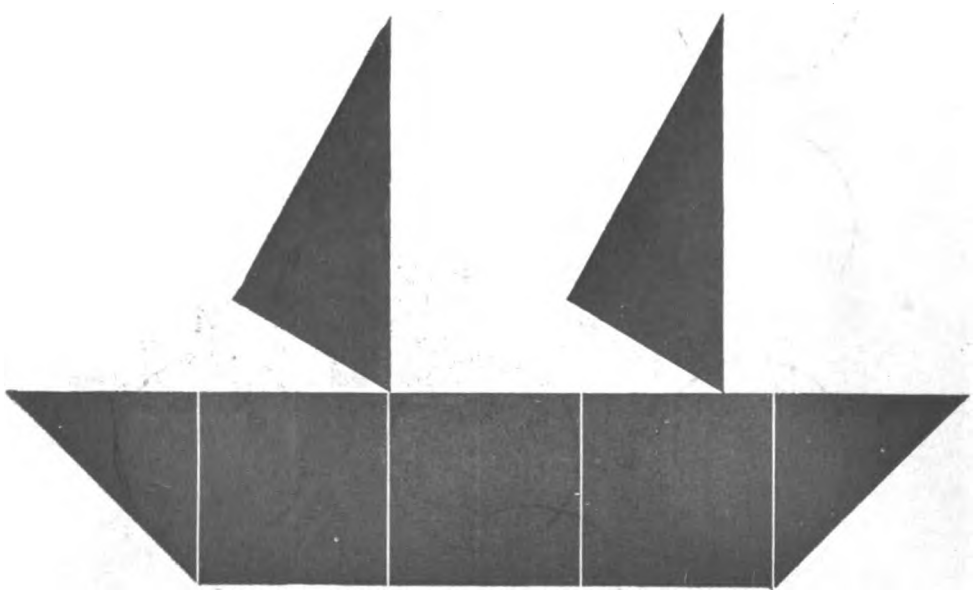

DESIGN FOR TABLETS OR PARQUETRY

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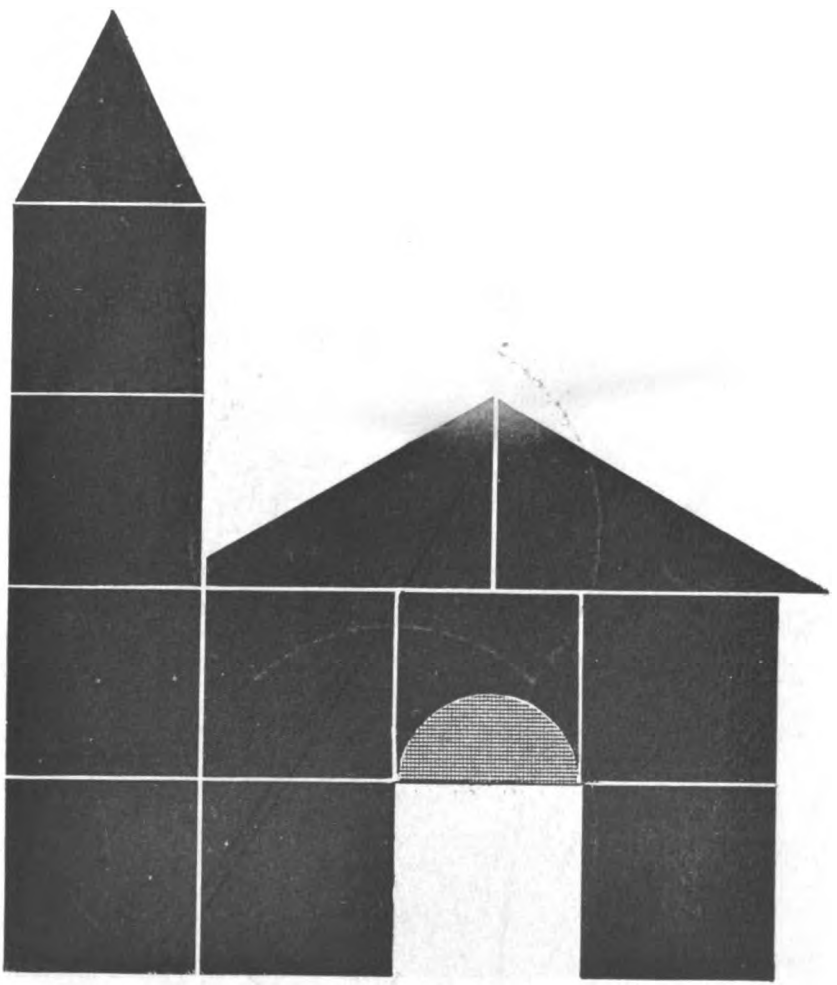

DESIGN FOR TABLETS OR PARQUETRY

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THE RED FAMILY

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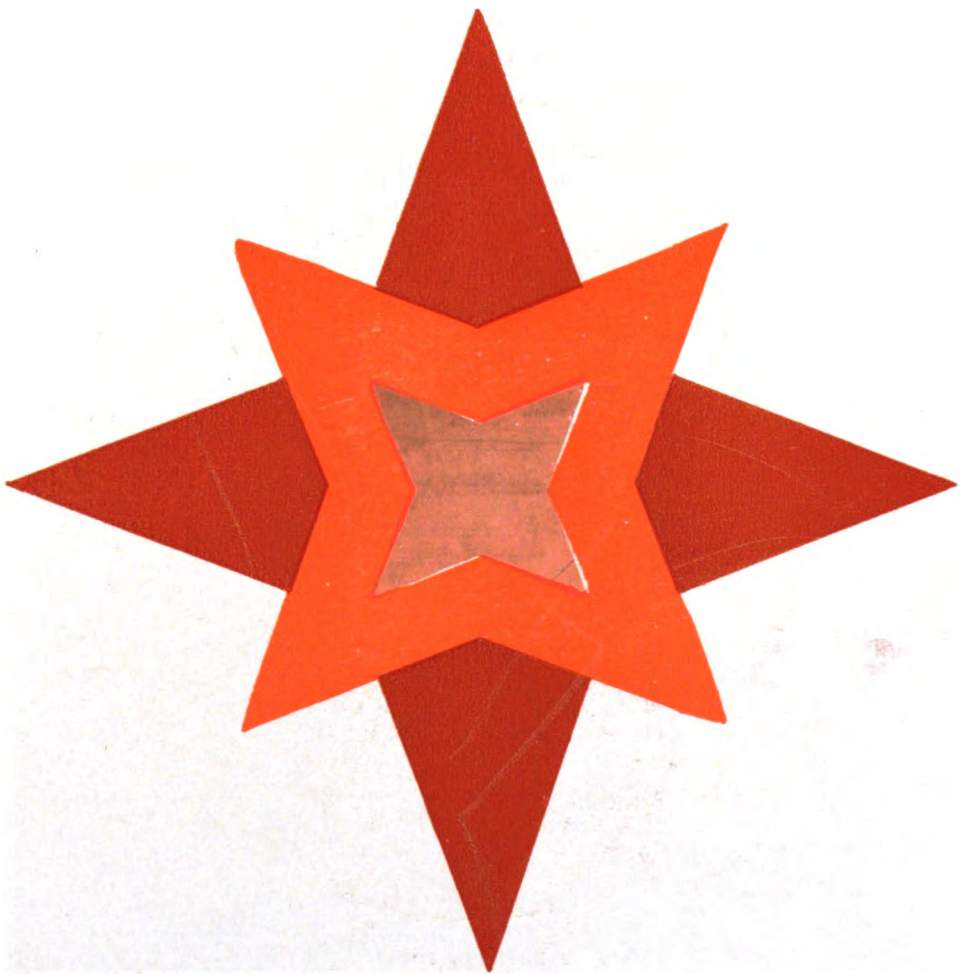

THE ORANGE FAMILY

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ROSETTE MADE BY FOLDING PAPER INTO EIGHTHS

THE YELLOW FAMILY

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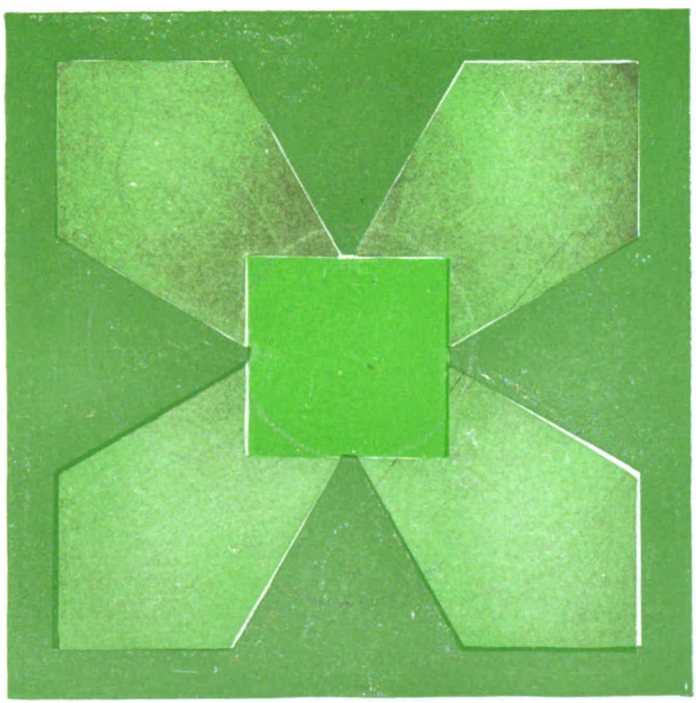

THE GREEN FAMILY

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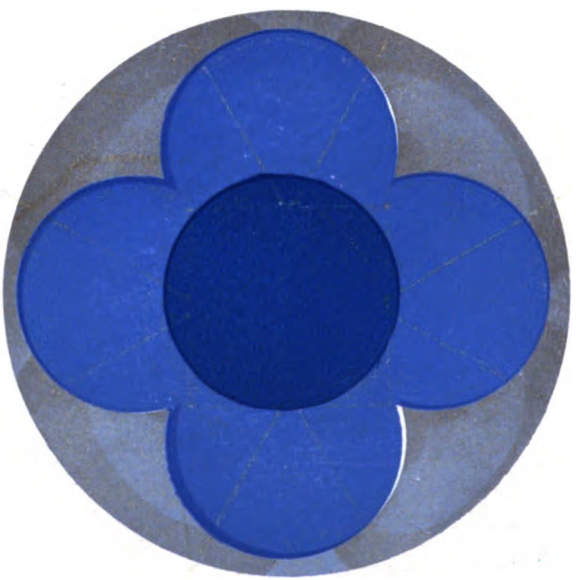

THE BLUE FAMILY

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This "tile pattern" is made by pasting the outer rim of violet shade and the inner one of standard violet on a foundation square of the violet tint. Both designs were cut from the paper after being folded into eighths.

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FREE-HAND CUTTING

As early as the child is able to handle the scissors it is his delight to cut. How many hours are spent before the school age in cutting aimless strips or "cutting out" pictures!

With great delight the children greet their old friend the scissors in the schoolroom; and still greater is their pleasure to discover their ability to cut pictures of their own.

In free-hand cutting *no outline is made with the pencil.* A drawing may be placed on the blackboard, or some simple object placed before the class; scissors and common white or manila paper are given to the children. Show them how by cutting before them; then let them cut out the form *entirely free-hand.* The results will be crude at first, but, with patience on the part of the teacher and perseverance on the part of the pupils, in a short time they will show great facility in the use of the scissors.

It is best to make the drawings on the blackboard solid white. Children do not think in outlines.

The first form, the circle, is attractive to the children as a dollar, the small circles then become dimes and quarters. Those with "corners" are rejected as "bad money." It is surprising to see their avidity

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for accumulating money at this early age under these circumstances.

Under the study of form, exercises in tracing around the circular tablet and then cutting are given. This is valuable for getting the rotary motion of the scissors.

From the circle to the fan, apple, or pear is but a step, and the road thereafter is optional with the teacher.

Usually white or manila paper is used for this work, but for decorative purposes colored paper or colored crayons may be introduced.

This is ideal seat work and is one of the best occupations for the lower grades while other recitations are being heard. It should always be a lesson in neatness and order. Scraps should be picked up and the wastebasket passed each time. A square of cloth for a scissors-mat protects the desk and also prevents noise.

Various plans will suggest themselves for keeping the good work. The cuttings may be pasted on mounting cards and displayed about the room. The best cuttings may be selected and kept in envelopes by the children and pasted in individual scrapbooks once a week.

Imaginative work in illustrating reading lessons, stories, or verses is important. Mother Goose rhymes are suitable for this work.

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A SUGGESTIVE OUTLINE FOR CUTTING

First Month.—Round Things.

Circle	Fan
Pear	Balloon (p. 98)
Apple	Japanese Lantern (p. 154)

Second Month.—Straight Line Objects.

Boat	Cup
House	Hat
Tools (p. 81)	Coffee Mill

Third Month.—Harvest.

Leaves
Fruit
Vegetables
Thanksgiving Pictures—
Wigwam
Canoe
Mayflower
Pilgrim

Fourth Month.—Christmas.

Toys—Horns	Drums	Boat
Tops	Dolls	Balls
Guns	Dishes, etc.	

Fireplace
Tree
Bells
Santa Claus

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Fifth Month.—Simplified Animal Forms.

Cat
Rabbit
Pig
Squirrel
Elephant

Sixth Month.—

Sunbonnet Baby
Pose work, using children as model
Cut from memory—
Things seen on way to school
Things mother uses in kitchen
The tools a carpenter uses

Seventh, Eighth, and Ninth Months.—

Songs and flowers
Continue to copy to some extent, but the most of the work should be original
Illustrate songs, reading lessons, and stories:—
Chicken Little
Ugly Duckling, etc.

In all this work review frequently, but do not attempt to keep to one model until it is perfected to the extent of weariness or monotony.

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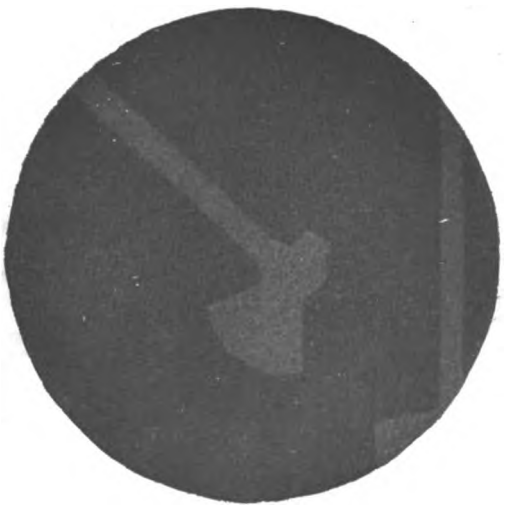

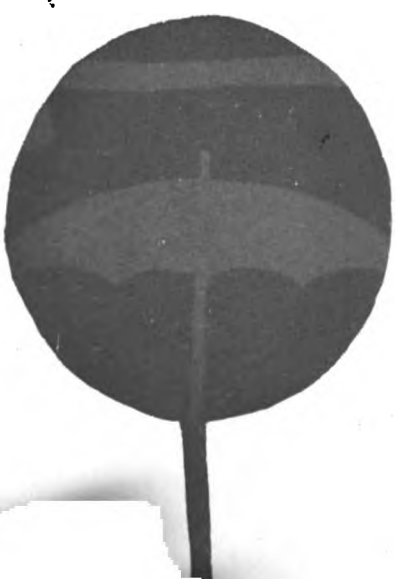

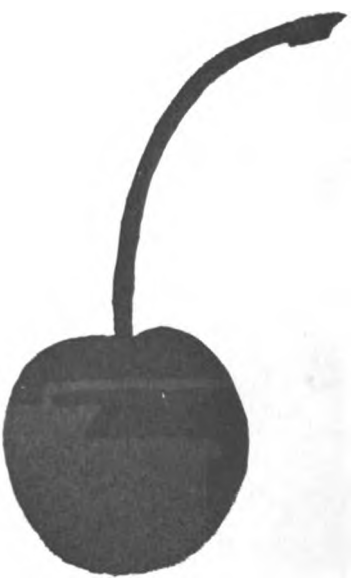

FREE-HAND CUTTING

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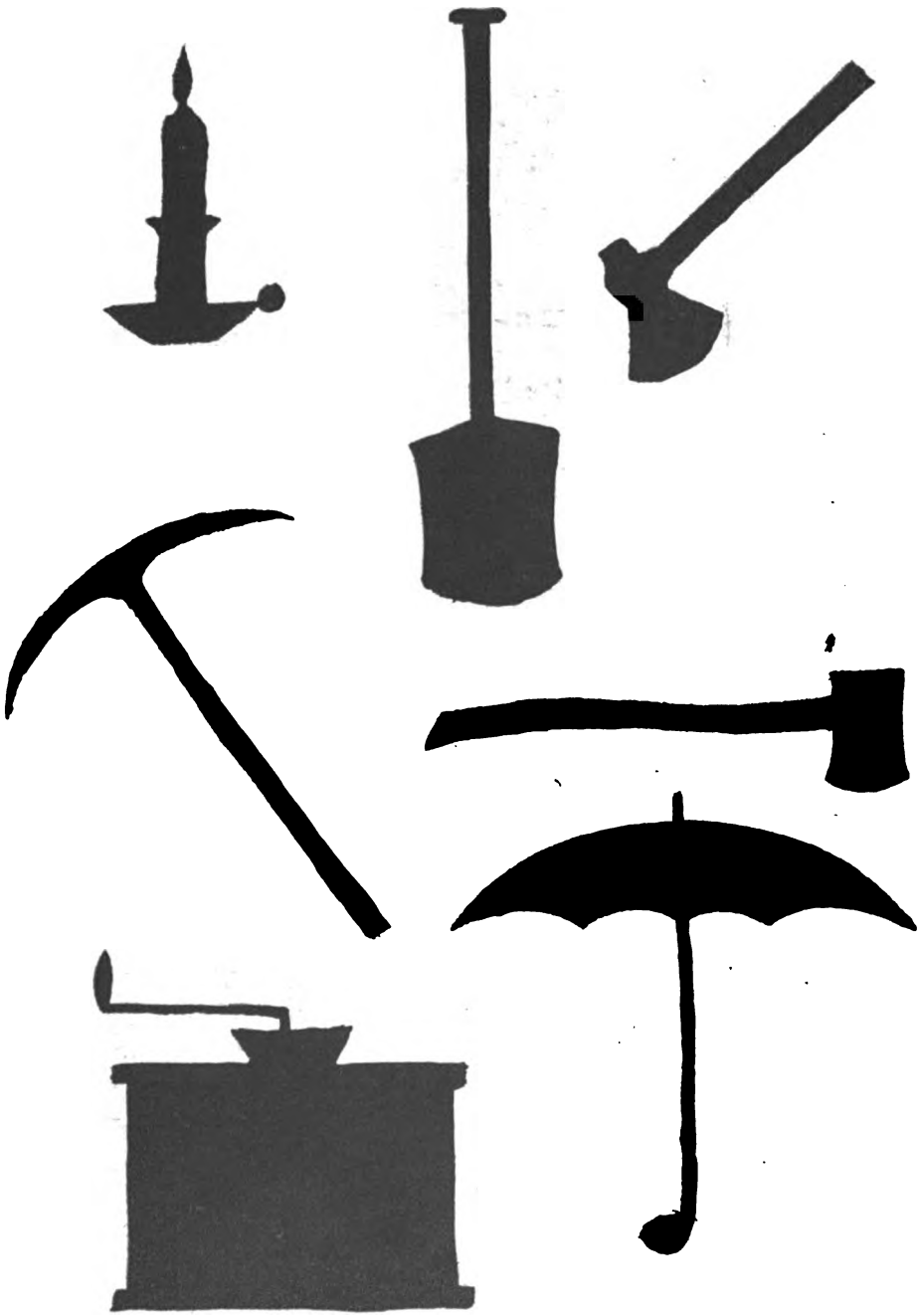

FREE-HAND CUTTING

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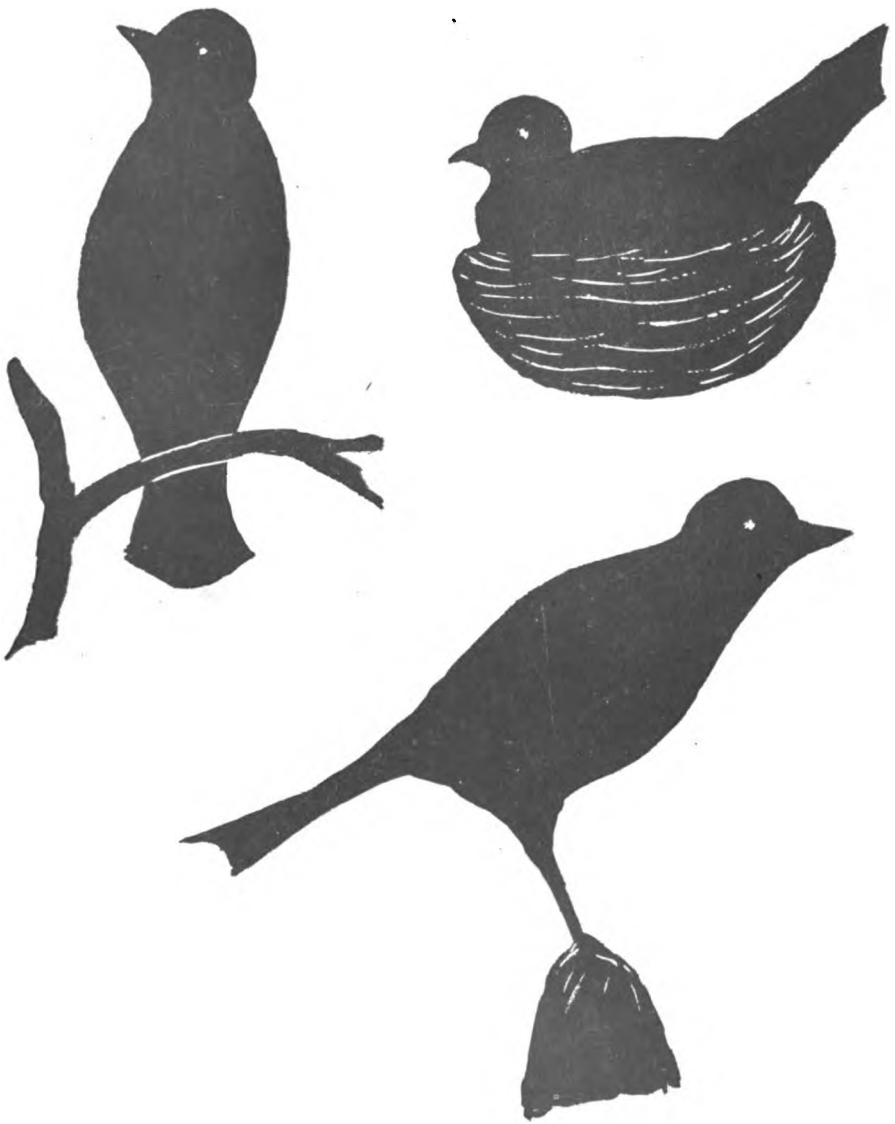

FREE-HAND CUTTING

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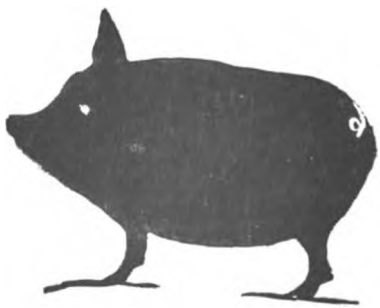

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A NEW JACK and JILL

FREE-HAND CUTTING MOUNTED

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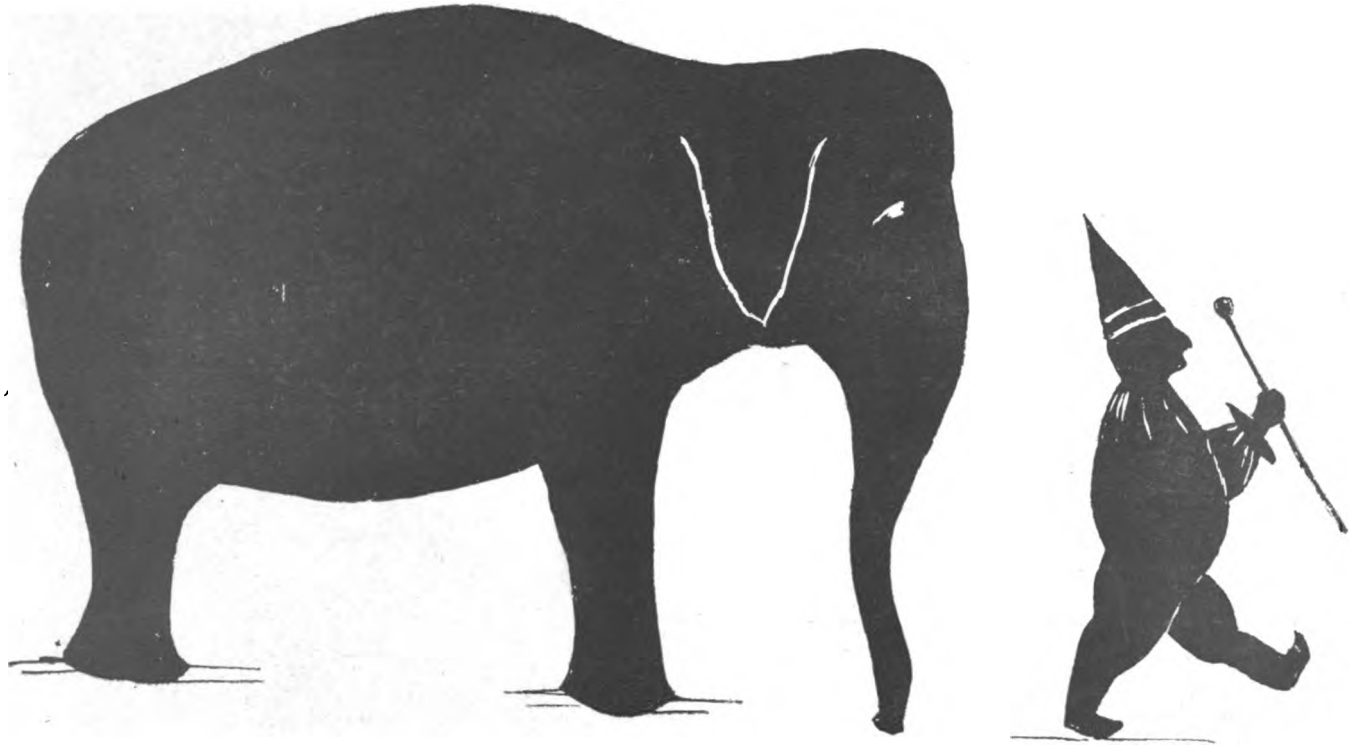

FREE-HAND CUTTING MOUNTED

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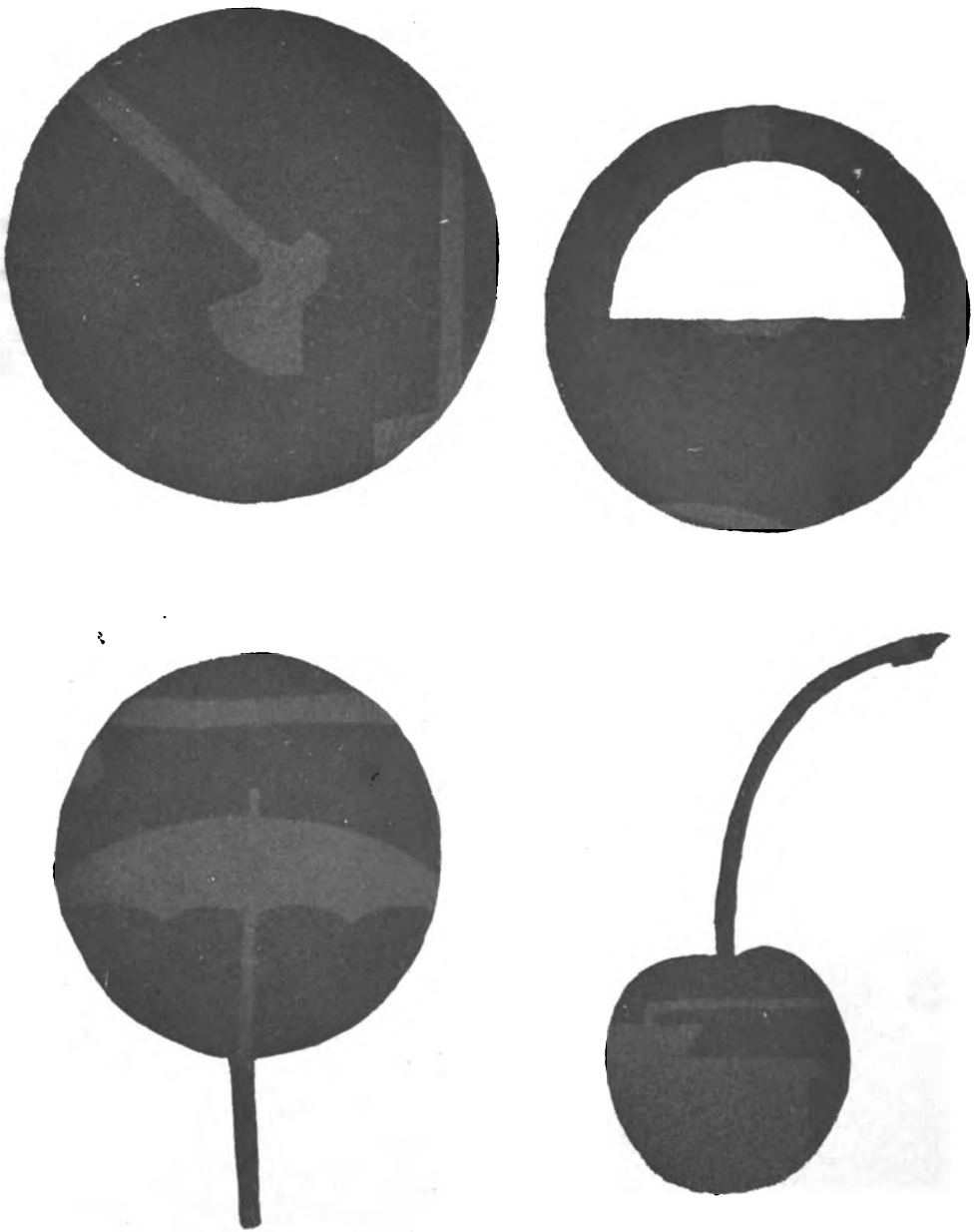

FREE-HAND CUTTING

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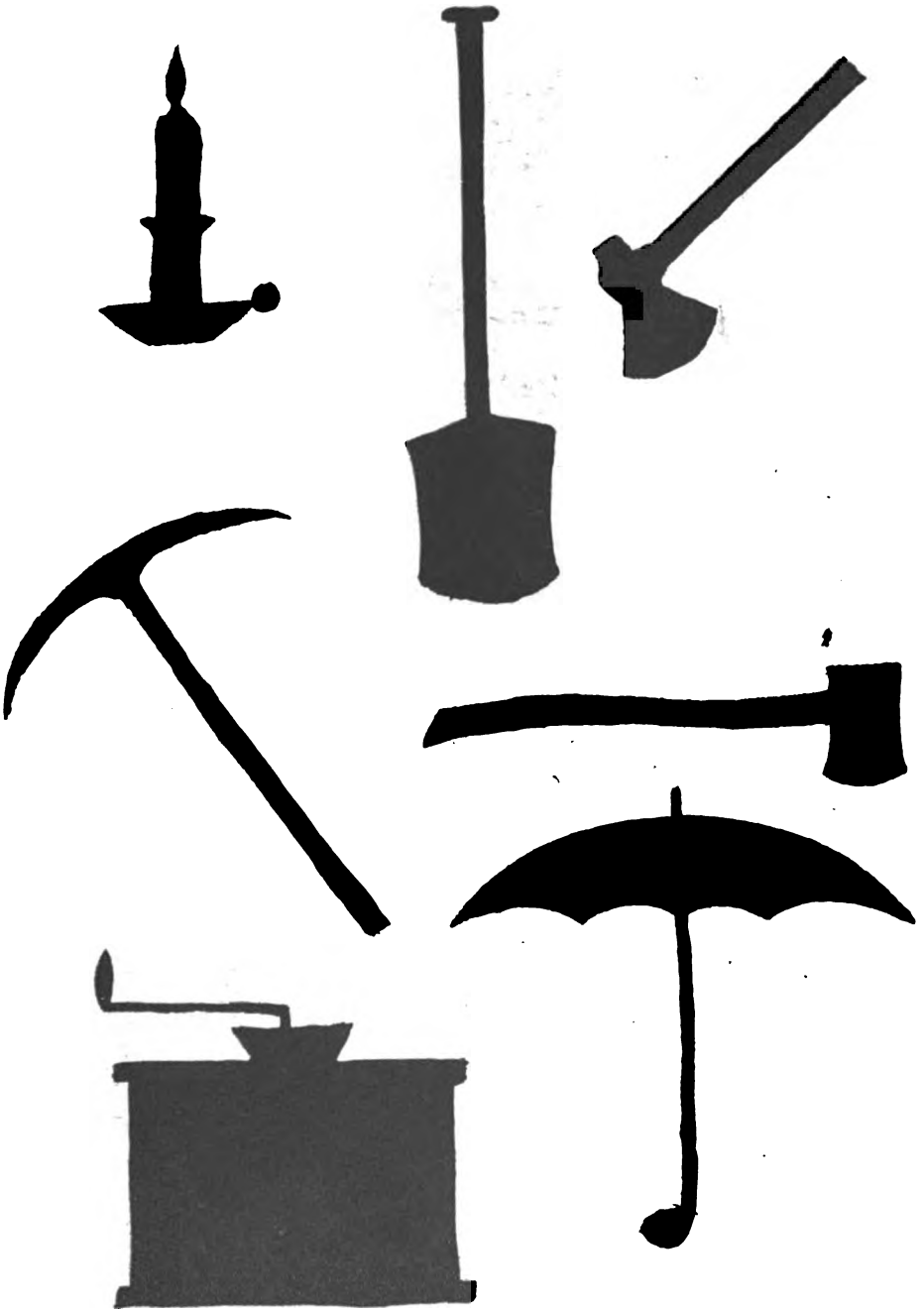

FREE-HAND CUTTING

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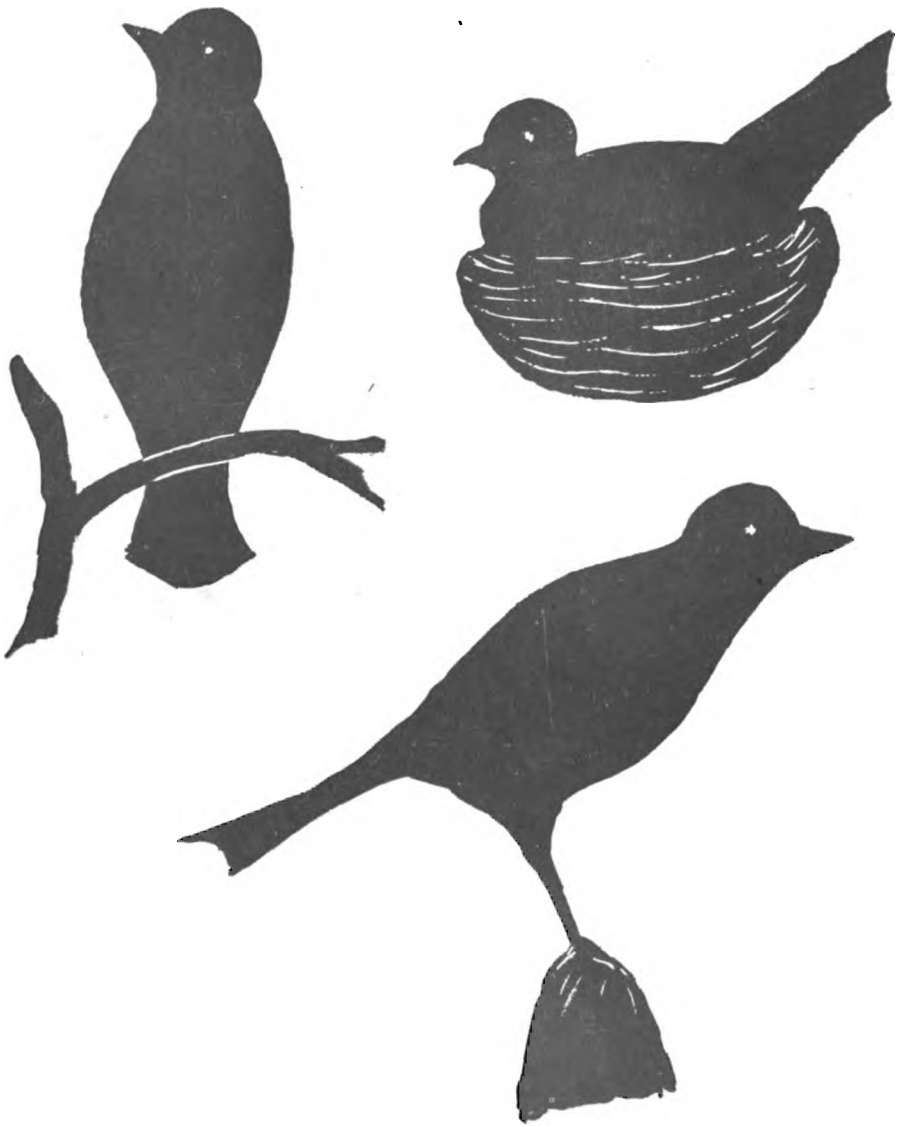

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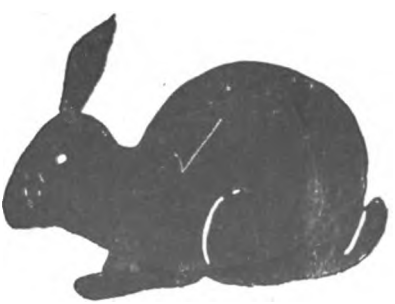

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A NEW JACK and JILL

FREE-HAND CUTTING MOUNTED

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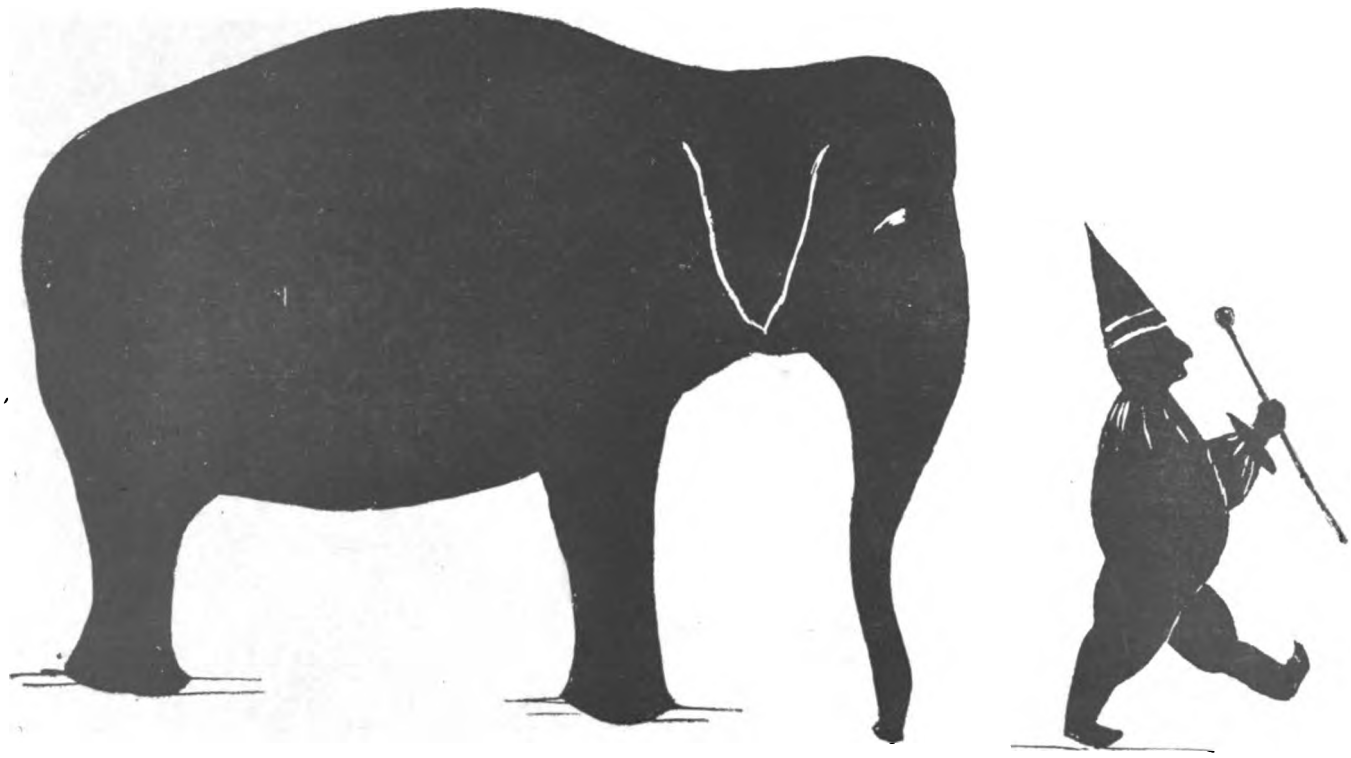

FREE-HAND CUTTING MOUNTED

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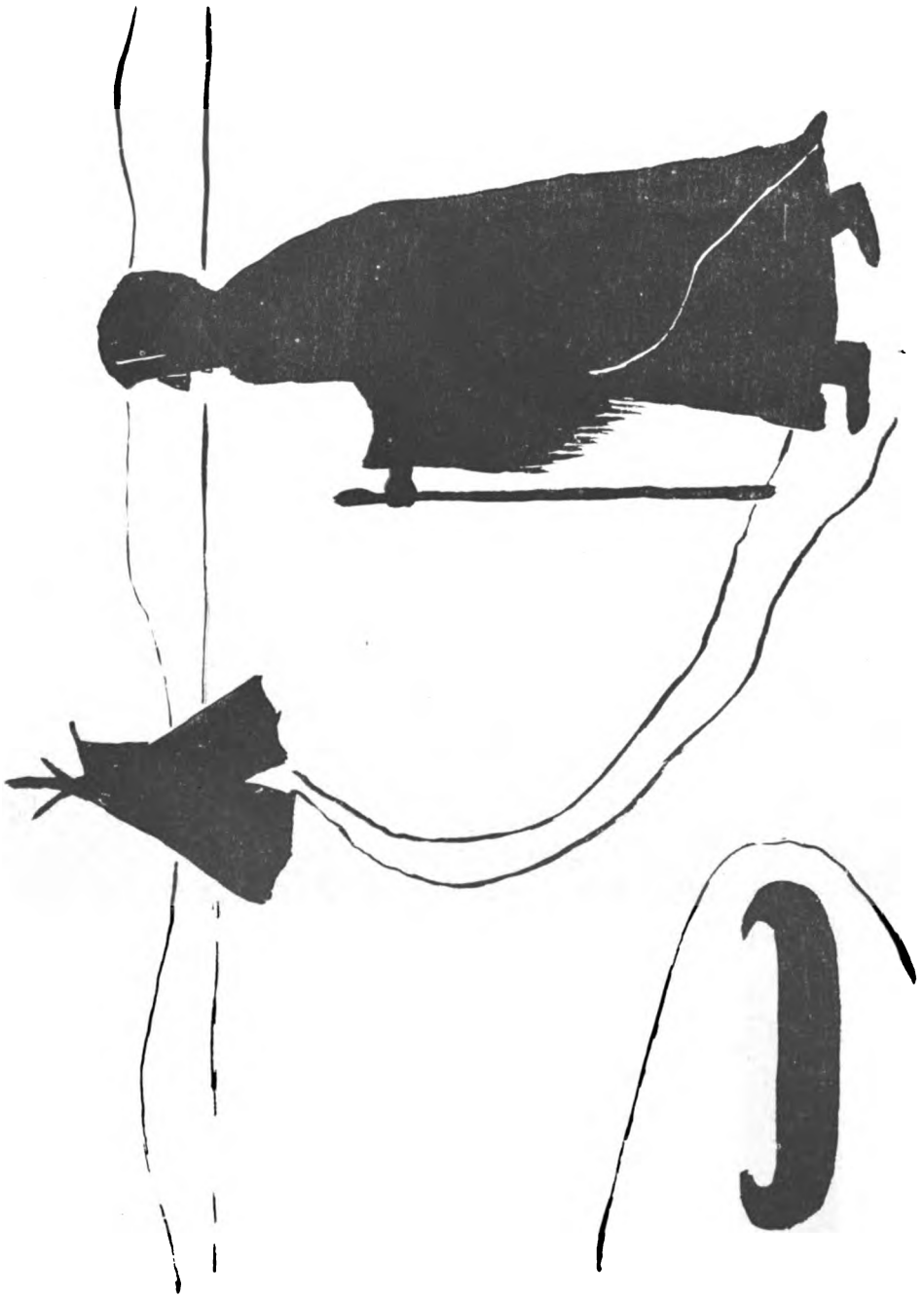

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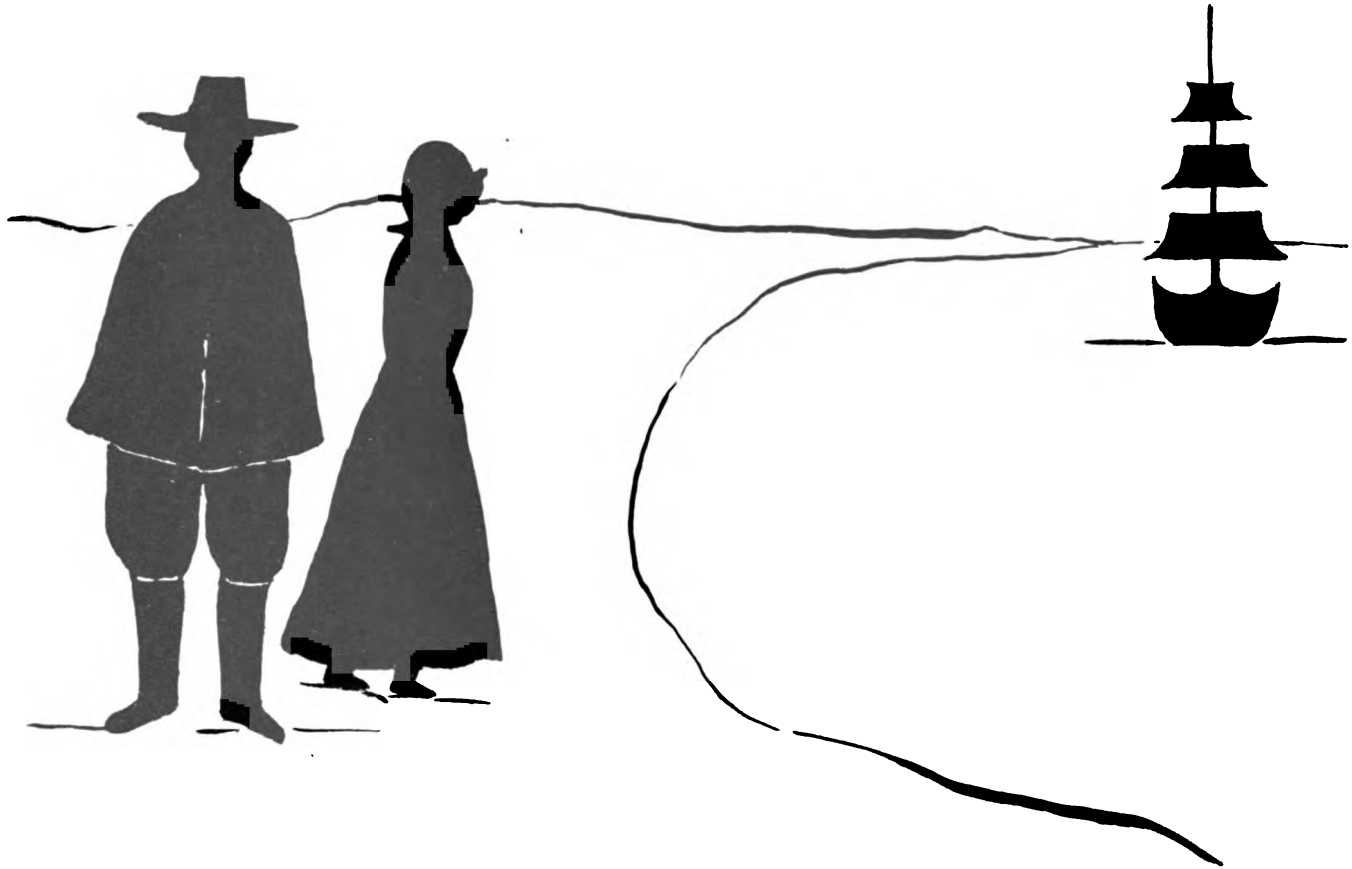

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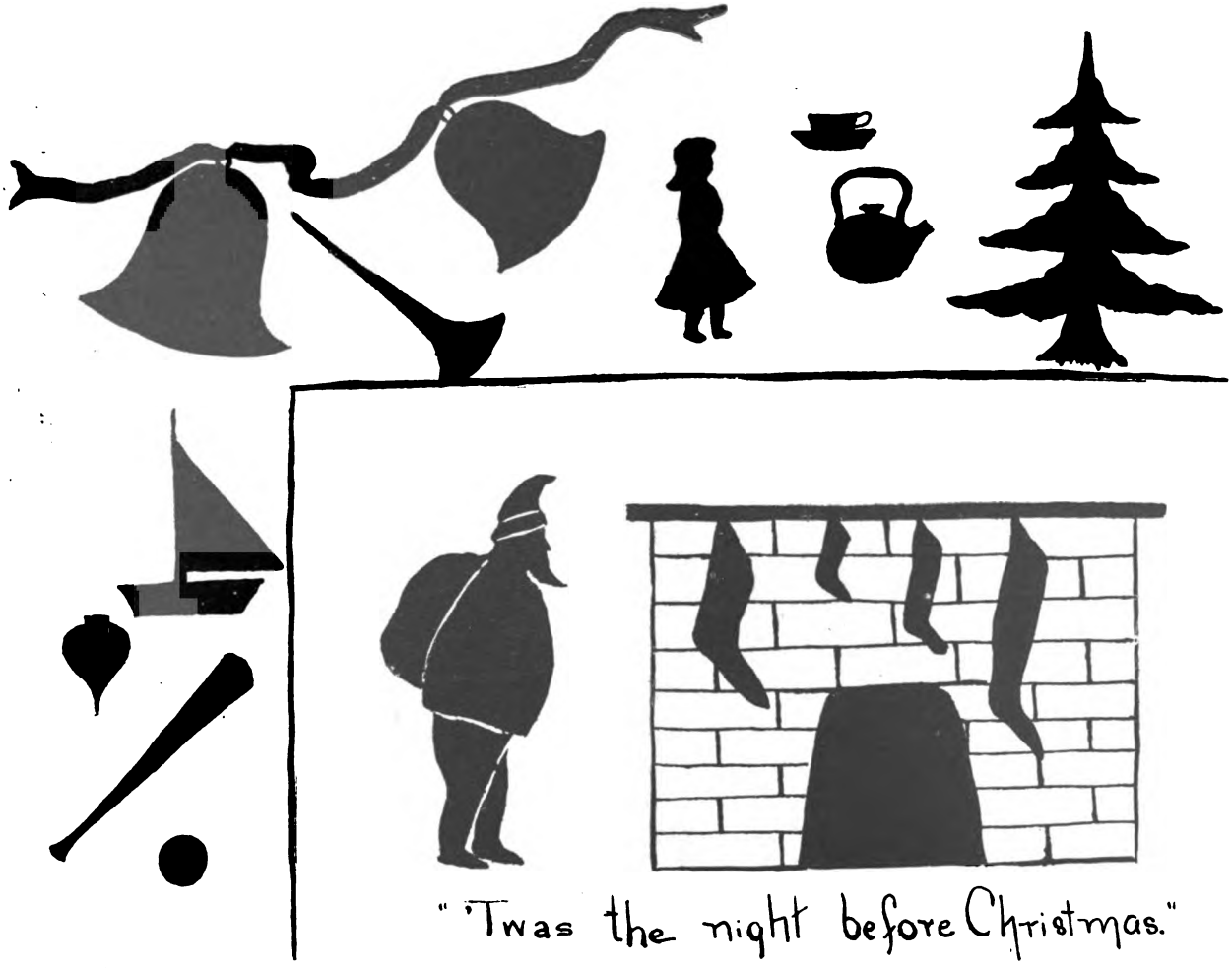

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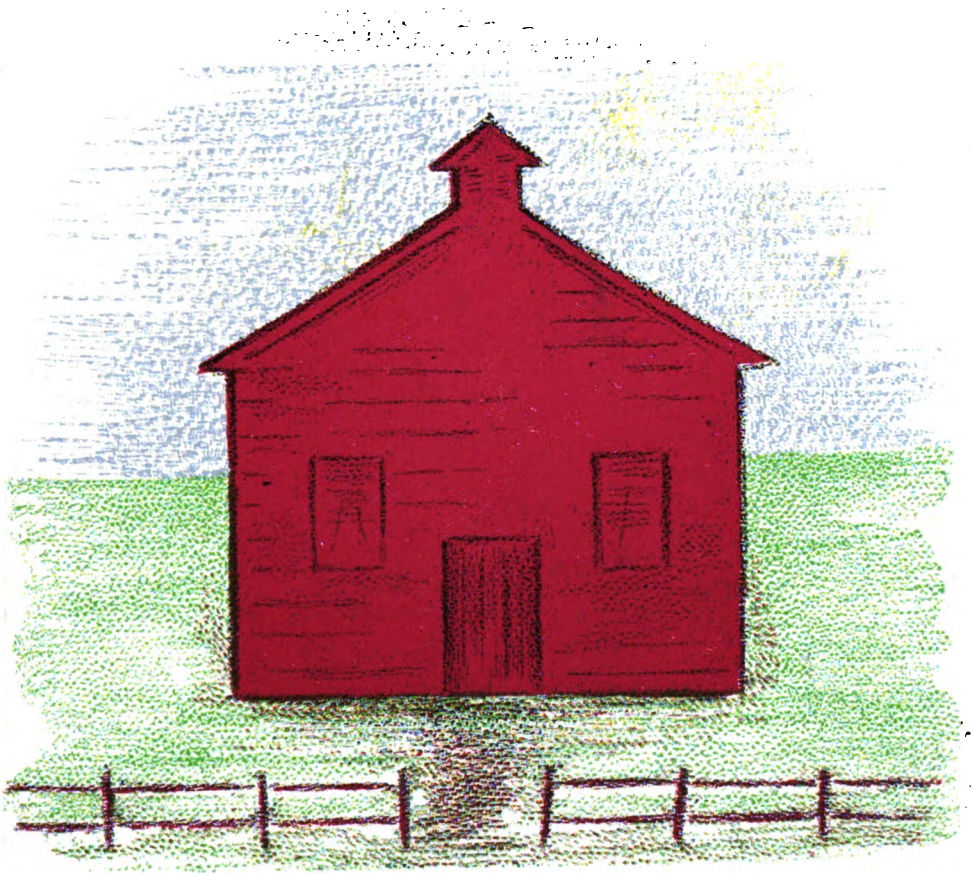

"STILL SITS THE SCHOOLHOUSE BY THE ROAD"

FREE-HAND CUTTING MOUNTED, WITH CRAYON TOUCHES

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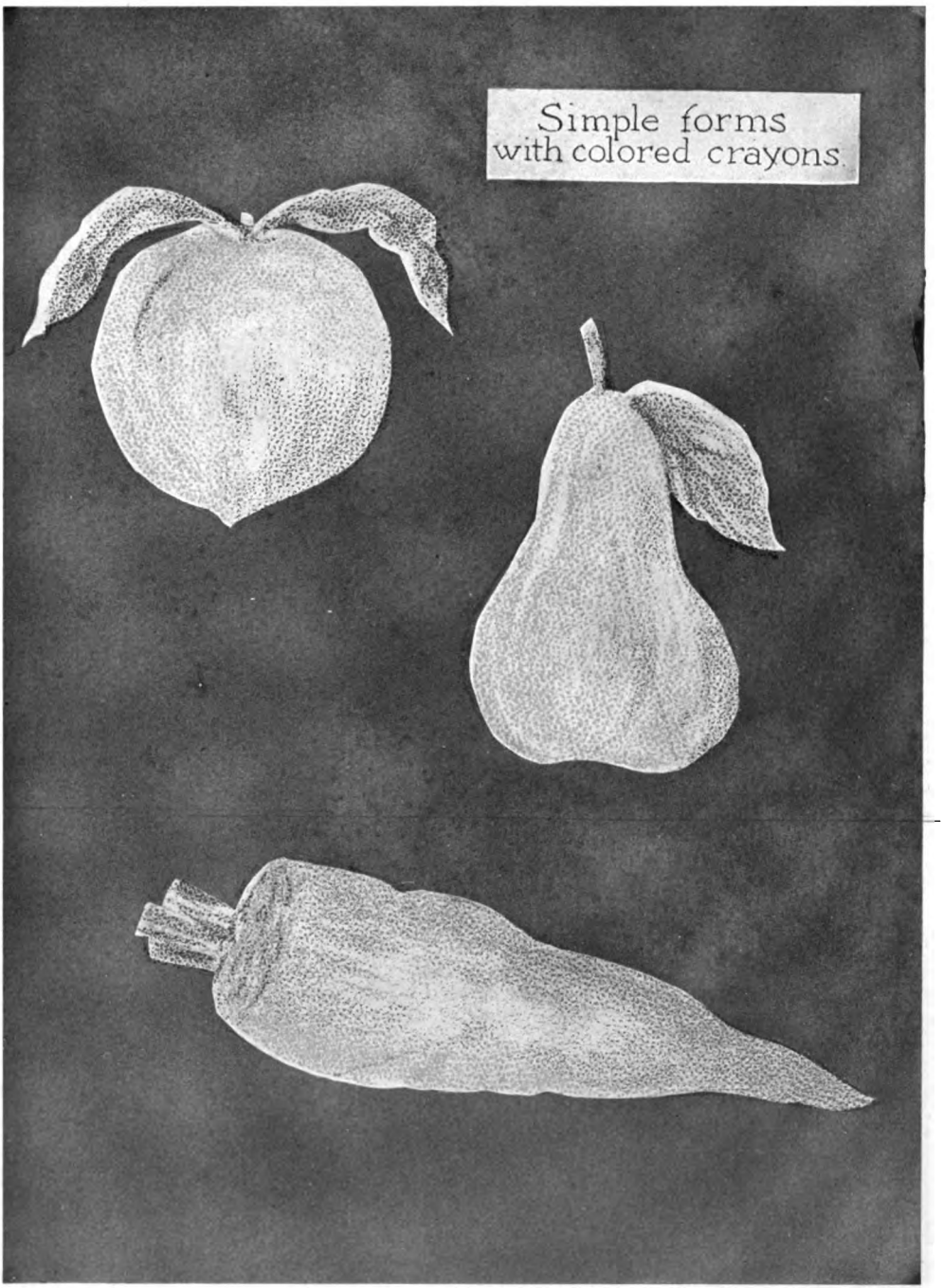

FREE-HAND CUTTINGS MOUNTED WITH CRAYON TOUCHES

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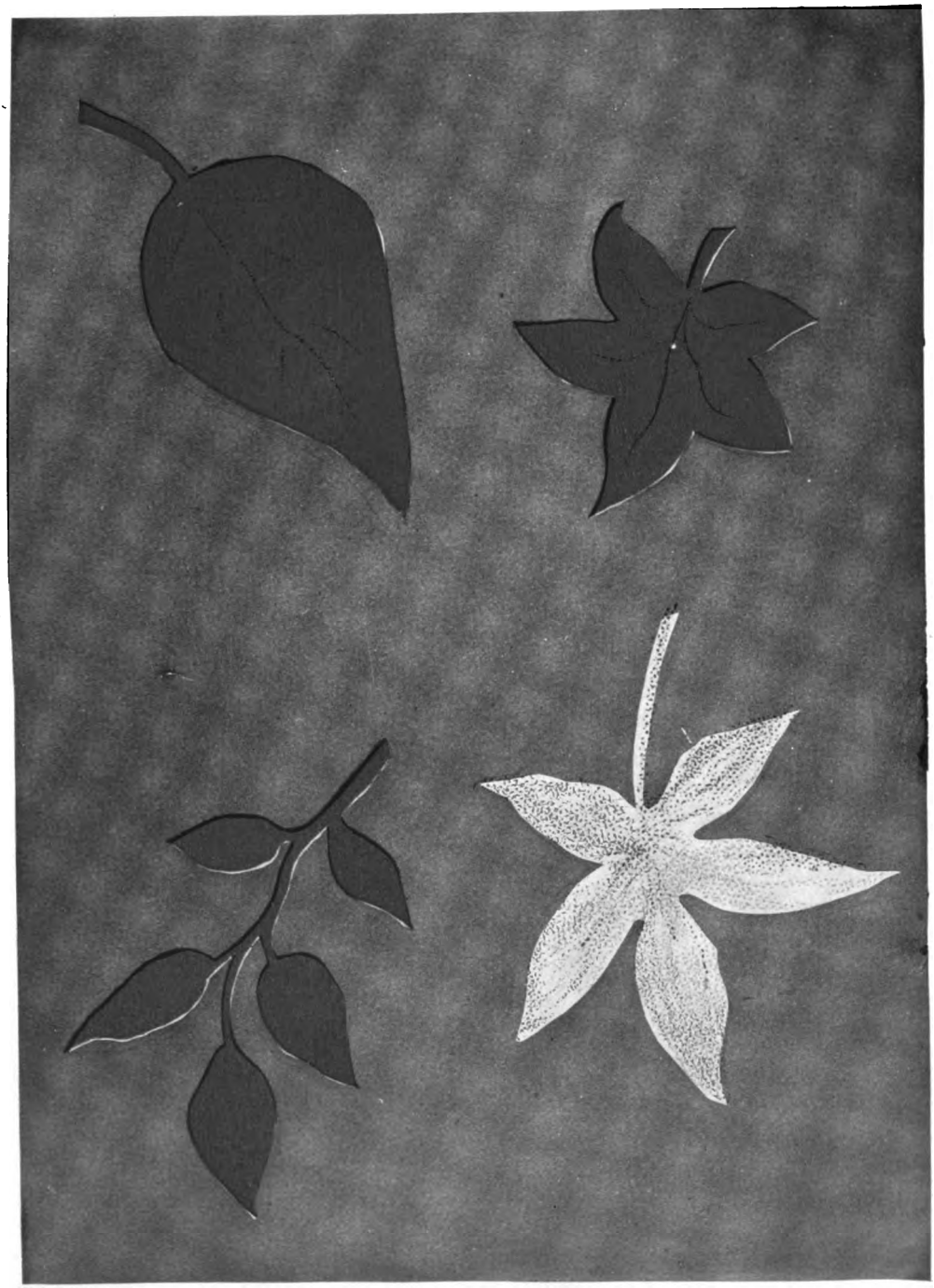

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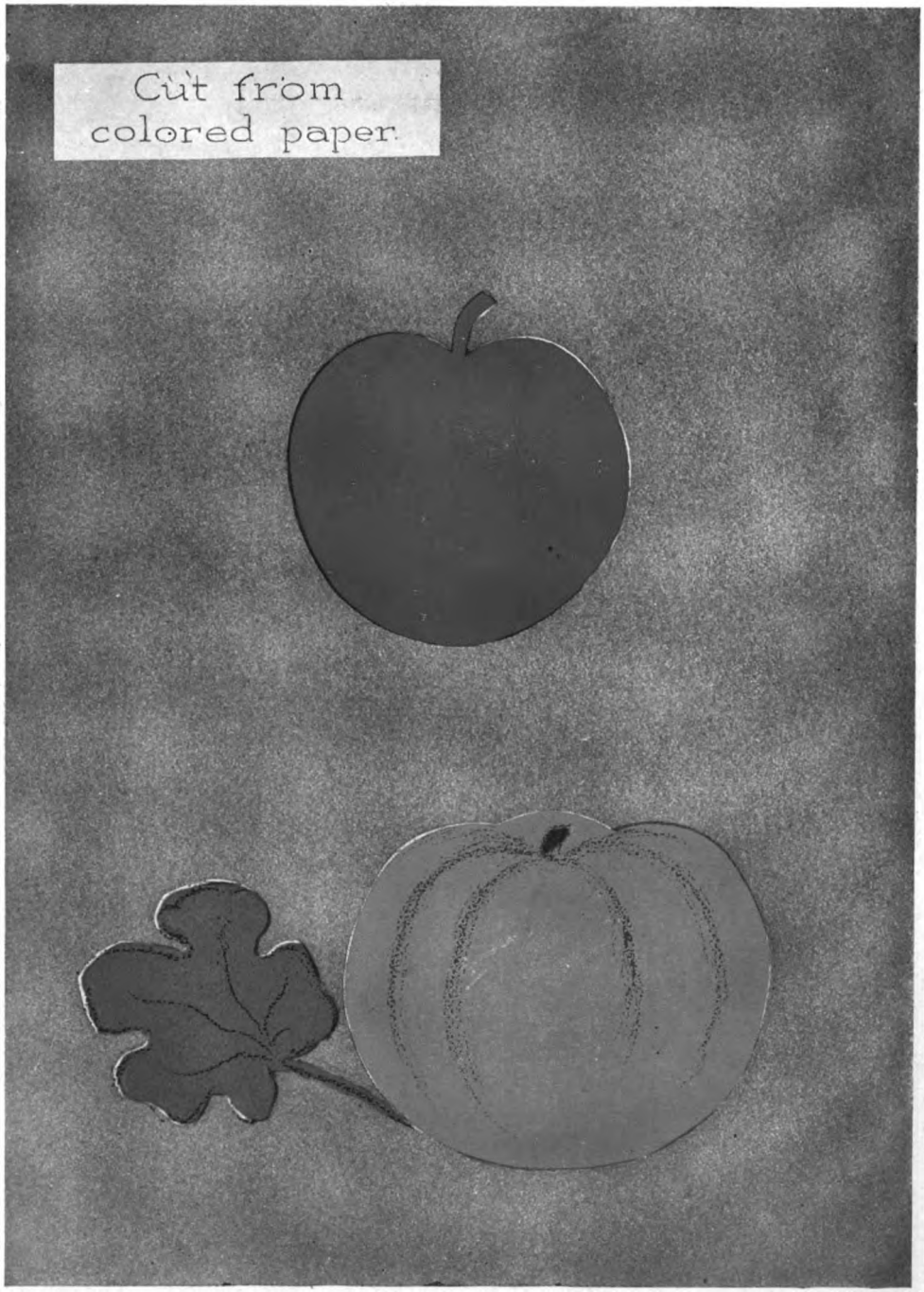

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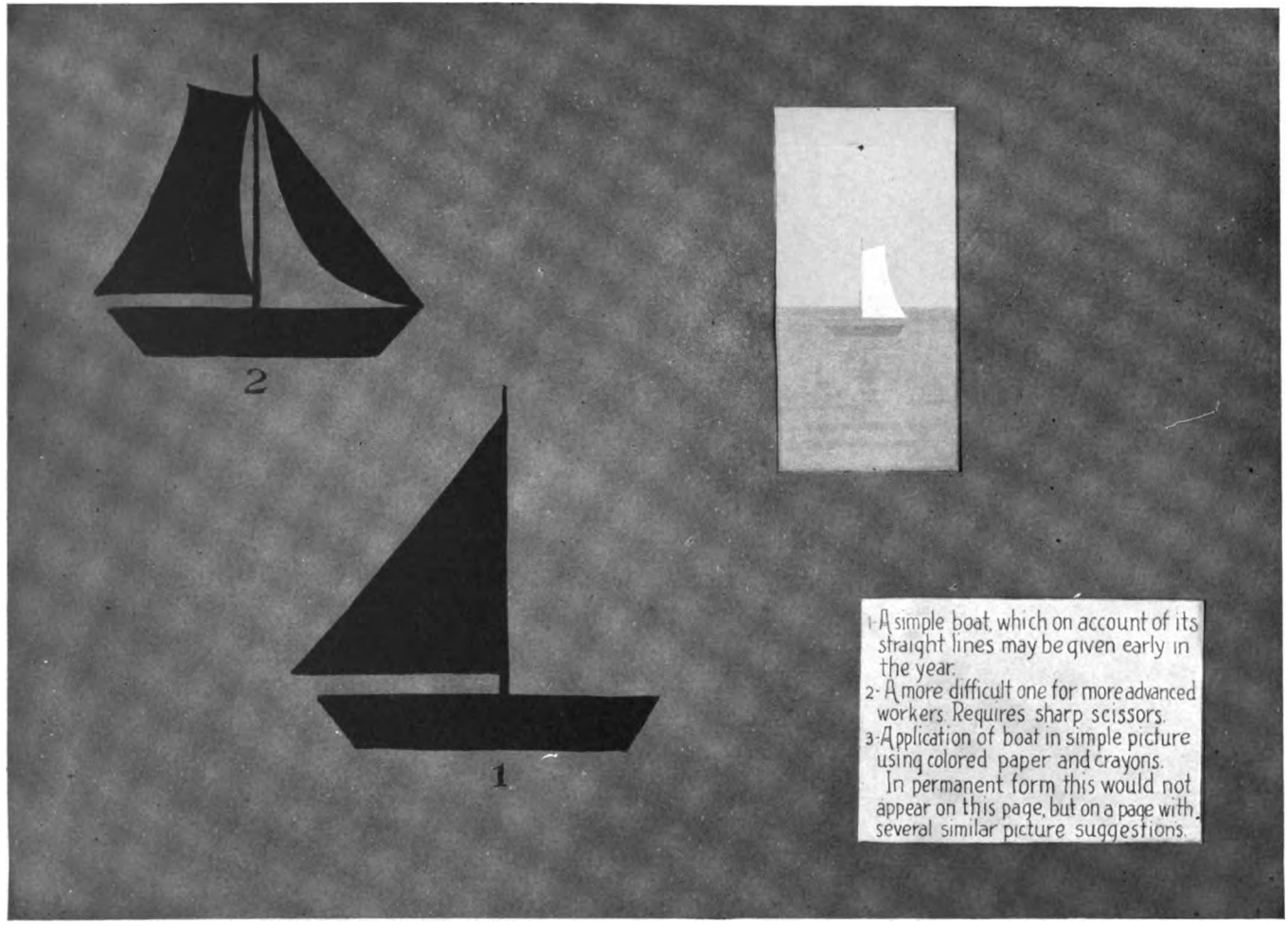

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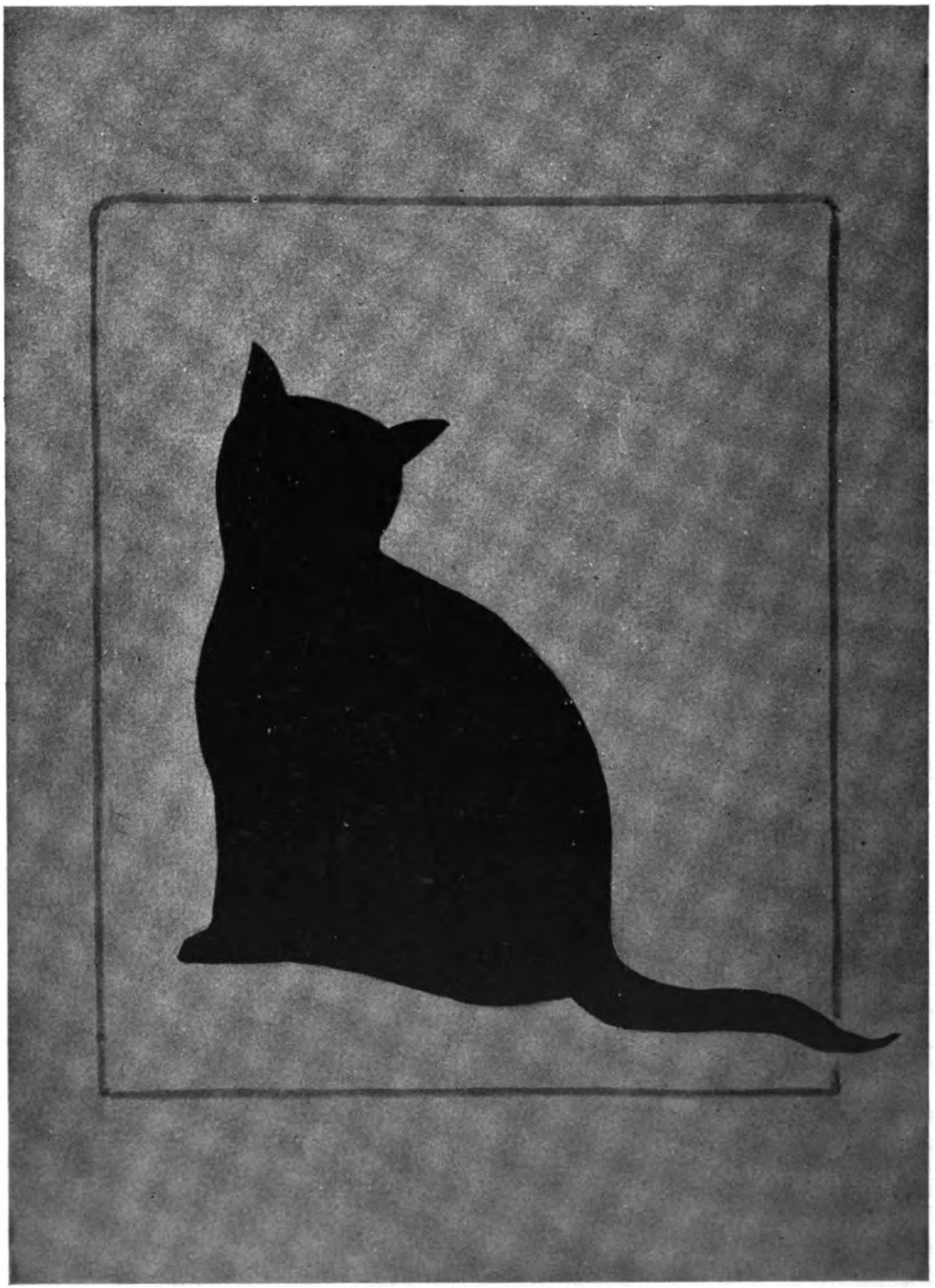

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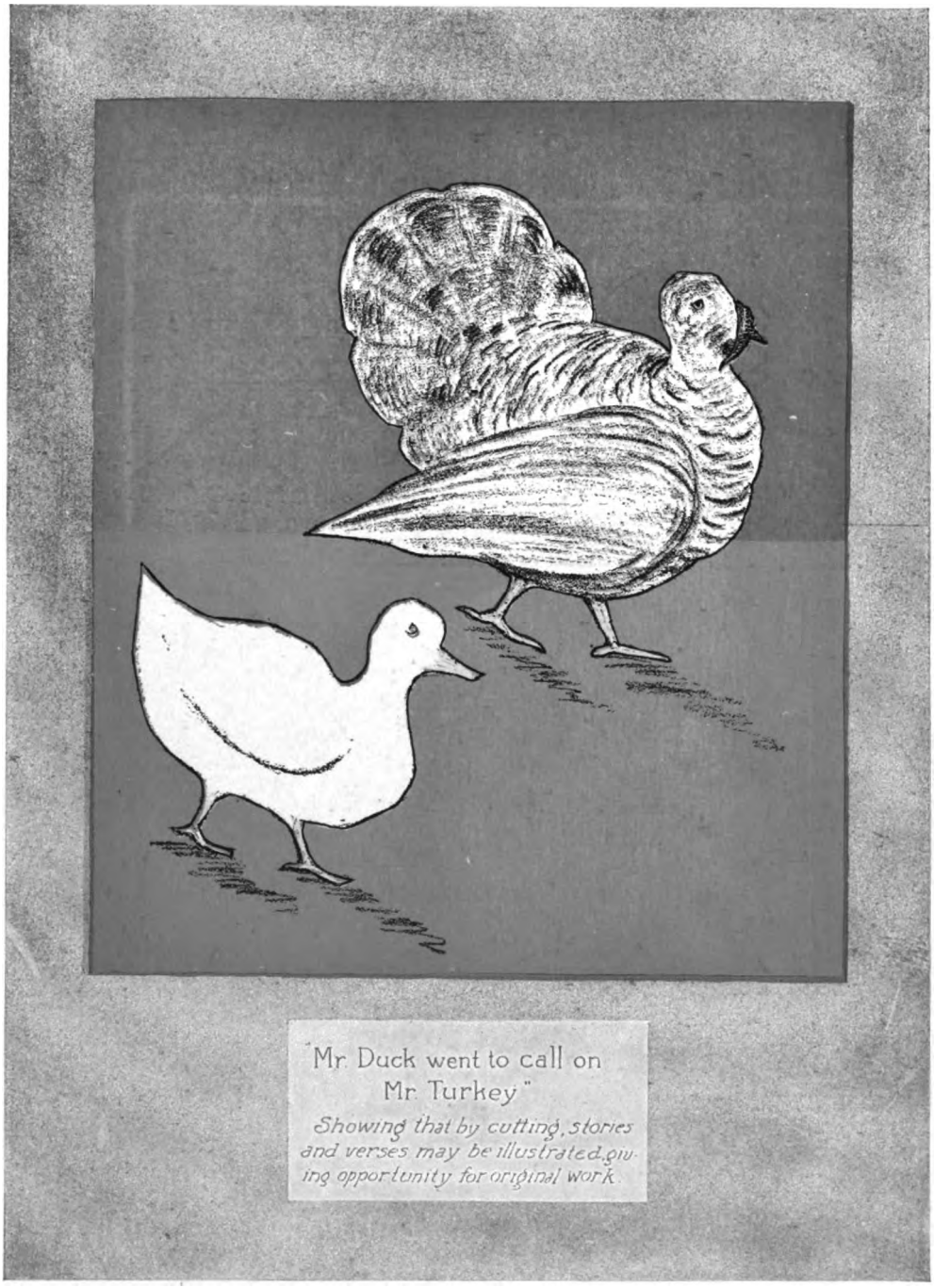

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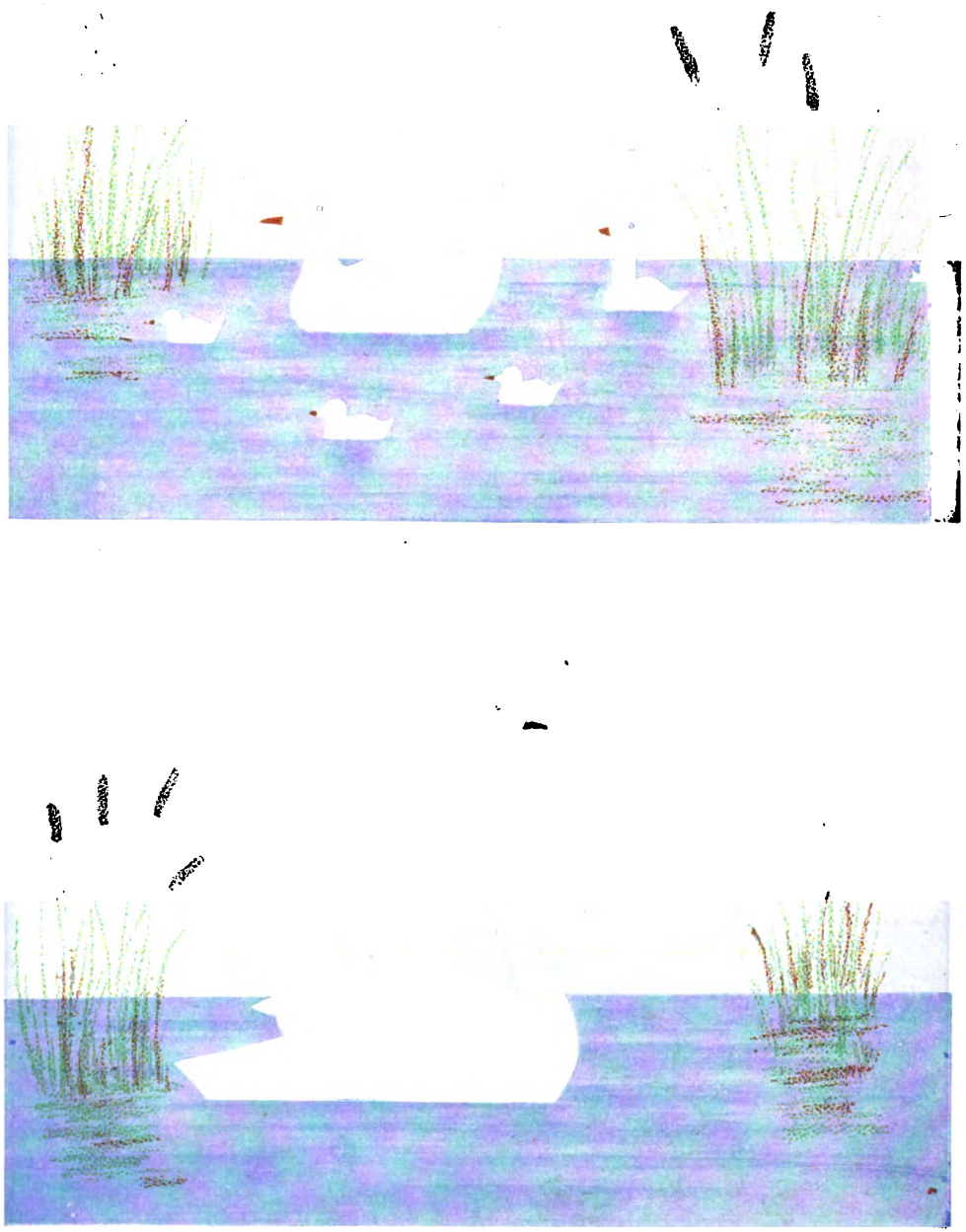

"THE UGLY DUCKLING"

FREE-HAND CUTTING MOUNTED, WITH CRAYON TOUCHES

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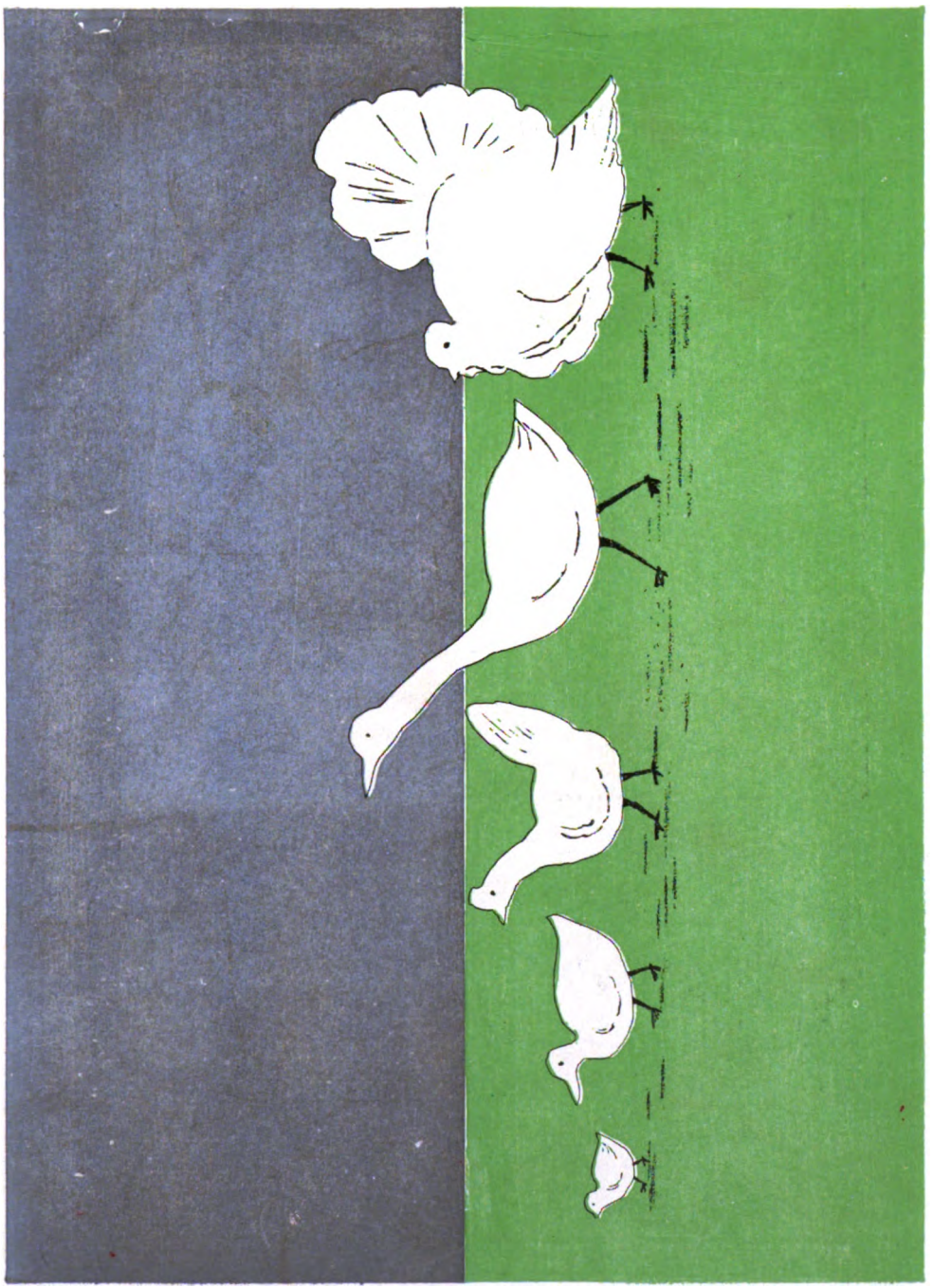

"LET US GO AND TELL THE KING"—THE STORY OF CHICKEN LITTLE

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FREE-HAND CUTTING MOUNTED, WITH CRAYON TOUCHES

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If, instead of chaining a child to his books, I occupy him in a workshop, his hands labor to the profit of his spirit, he becomes a philosopher, though he thinks he is only a workman. Now, of all the occupations which serve to furnish subsistence to man, that which brings him back to Nature again most closely, is the work of his hands.—Rousseau.

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WEAVING

If, as is ofttimes stated, the development of the child is along the same lines as that of the race, then, indeed, is weaving a natural impulse, being one of the oldest industries as well as one of the first occupations of all primitive peoples.

Weaving trains and strengthens the hand. By giving work to both hands it is valuable for developing hand dexterity. It lays a foundation in design, thus is an excellent preparation for the loom weaving which is finding its way into higher grade work. In addition to these, there is a number element, for in every pattern the child must count. Take, for instance, the pattern over three and under three; at first he counts laboriously, "one, two, three," each time, until by oft-repetition he recognizes three as a whole and has no need of counting.

Weaving furnishes an occupation for desk or class work. The material consists of mats cut into strips with a margin all round, and a set of strips joined at each end, but without a margin. Strips detached from the latter are woven into the former by means of a long weaving needle. This occupation will need an introductory lesson, in which the work is dictated, strip by strip. For this first practice work linen or other mats with wide fringes are recommended.

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Thin wooden slats may be used as weavers for this first lesson. After the idea has been mastered with these materials, the paper mat and long steel needle may be used.

Color Harmonies.—While the child's love of bright colors should be gratified, at the same time an appreciation of pleasing and harmonious combinations should be fostered. This is an opportunity for teaching color, to which end the standards with their tints or shades, or with neutrals, should at first be presented. In later work there is no reason why any pleasing combination should not be used. It were wise to make the matter a subject of careful study, however, remembering that it requires a trained or gifted eye to make these combinations, and that many color crimes are committed in the name of harmony.

The first six of the designs presented form a sequence as numbered. In schools in which this work is given as desk work without the supervision of the teacher, mats of the first design, over one and under one, should be given until pupils learn how to start each strip.

If possible, dictate the first lesson in weaving, strip by strip.

A mat with an even number of strips is preferable at first. In using these, by starting first at the right and then at the left, each strip is started like the one before. This necessitates the use of both hands, and is a joy to the left-handed child. If there is an odd

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number of strips, it must be started first under the first strip, the second time over the first strip, the third time under again, and repeated in this way all the way down, beginning on the same side each time.

The remainder of the designs are given for advanced work, or for those pupils who accomplish more than the rest of the class. For large mats repeat the pattern as often as the size of the mat allows. Small work and intricate patterns are not desirable; the ability used to make these had better be directed into some other channel. Weaving is a means to an end, and not the end itself.

Much weaving may become a weariness to the flesh unless a new cause for satisfaction, either by its greater beauty or its application to forms of use, is born with each mat.

Weaving mats may be put to various uses, some of which are shown in another part of this book. In addition they make bedspreads, table covers, and even rugs for the playhouse. They also make pretty and appropriate book covers for books of school work.

Each pupil should be provided with a manila paper case in which his mats and needle are kept; thus the distribution of materials is simplified.

To finish mats, trim away projecting ends and fasten each strip in place by pasting along the margin on the wrong side.

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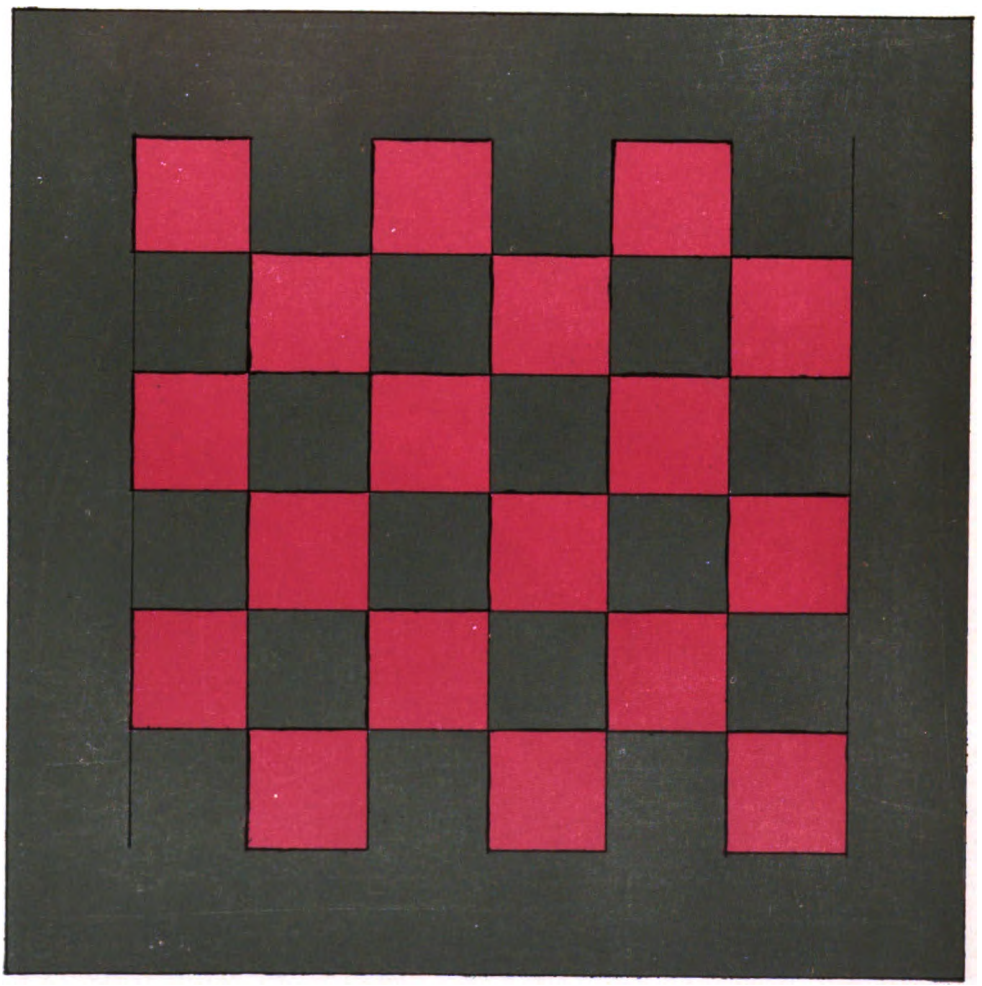

WEAVING DESIGNS

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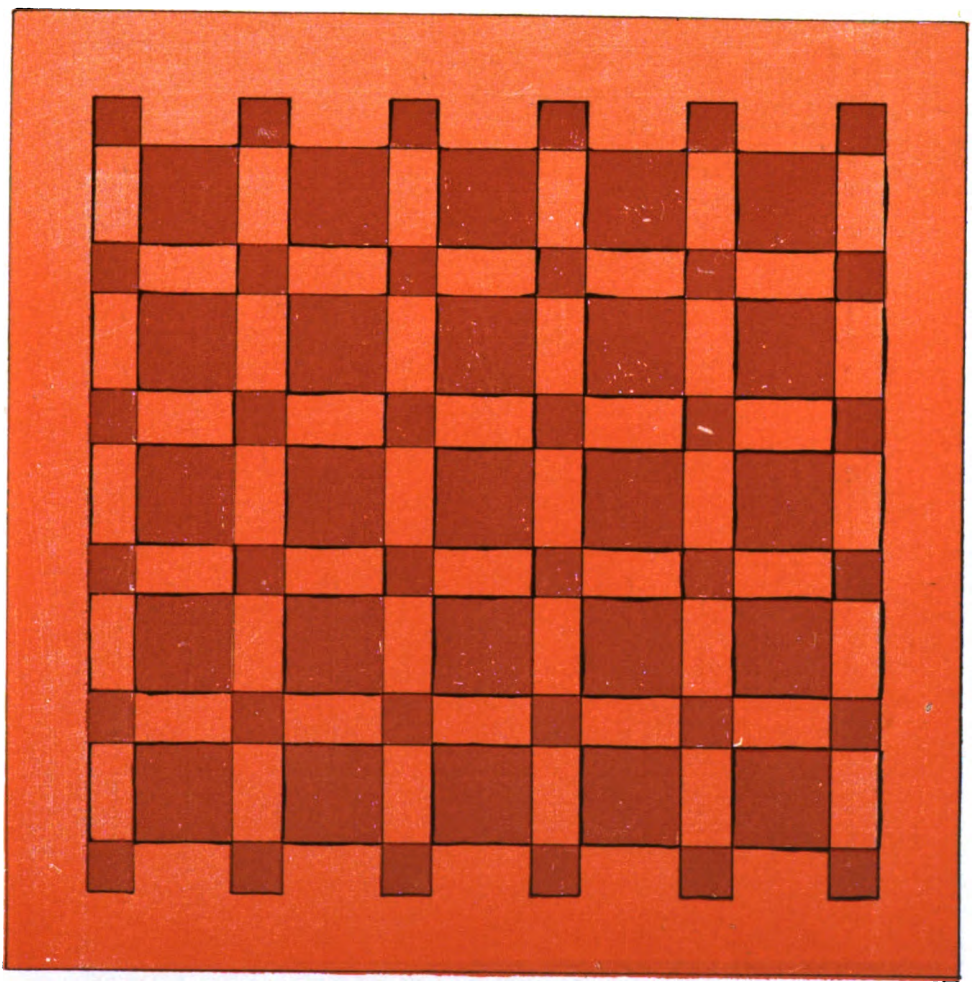

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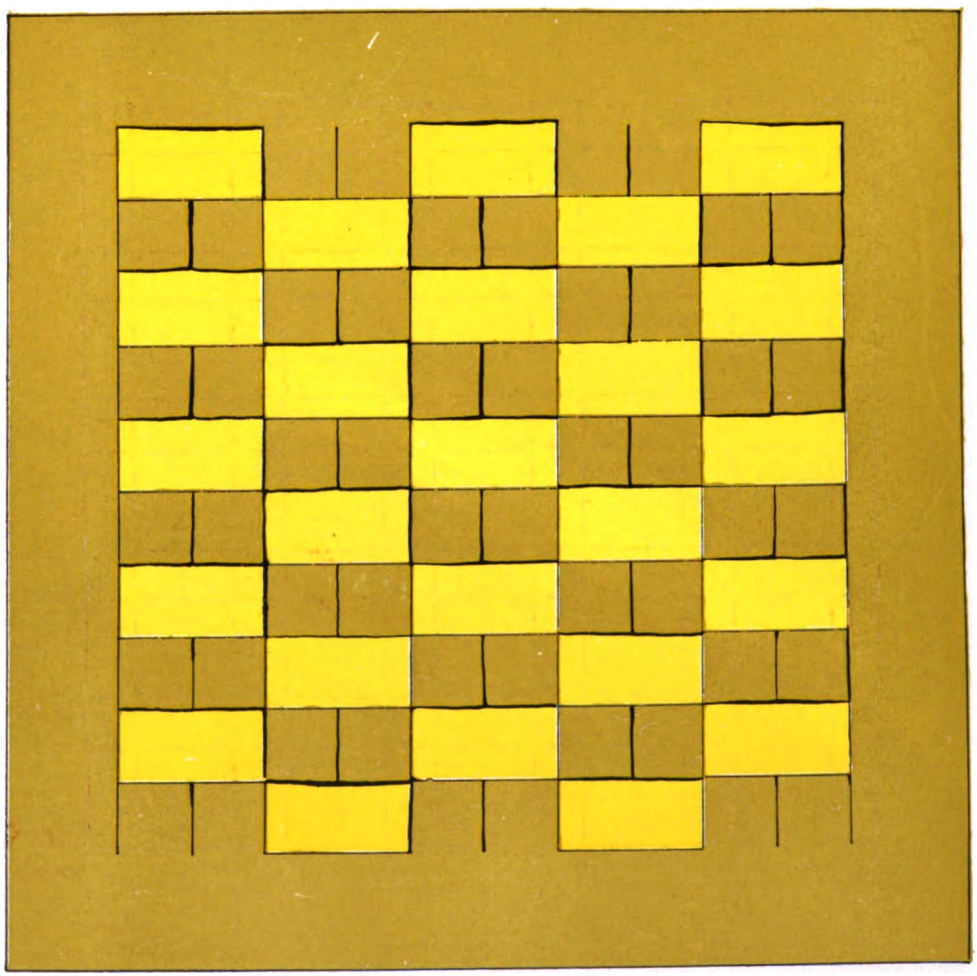

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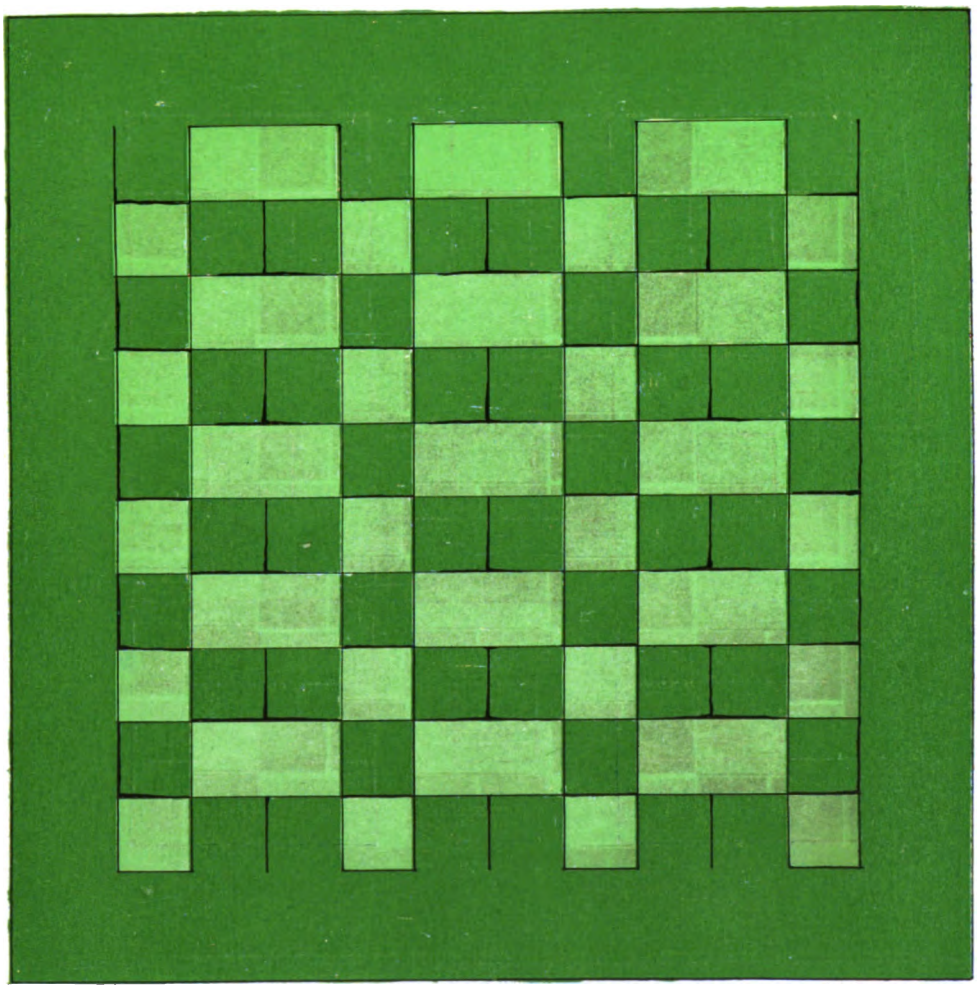

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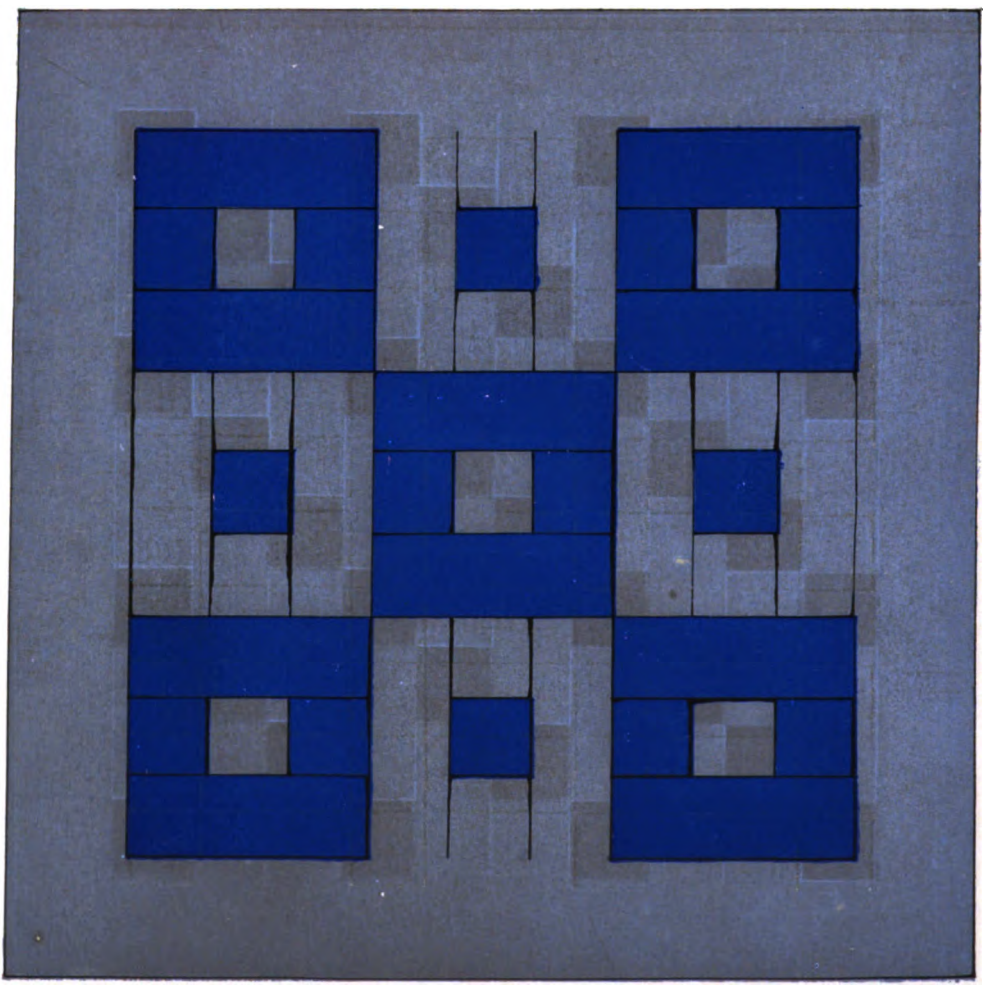

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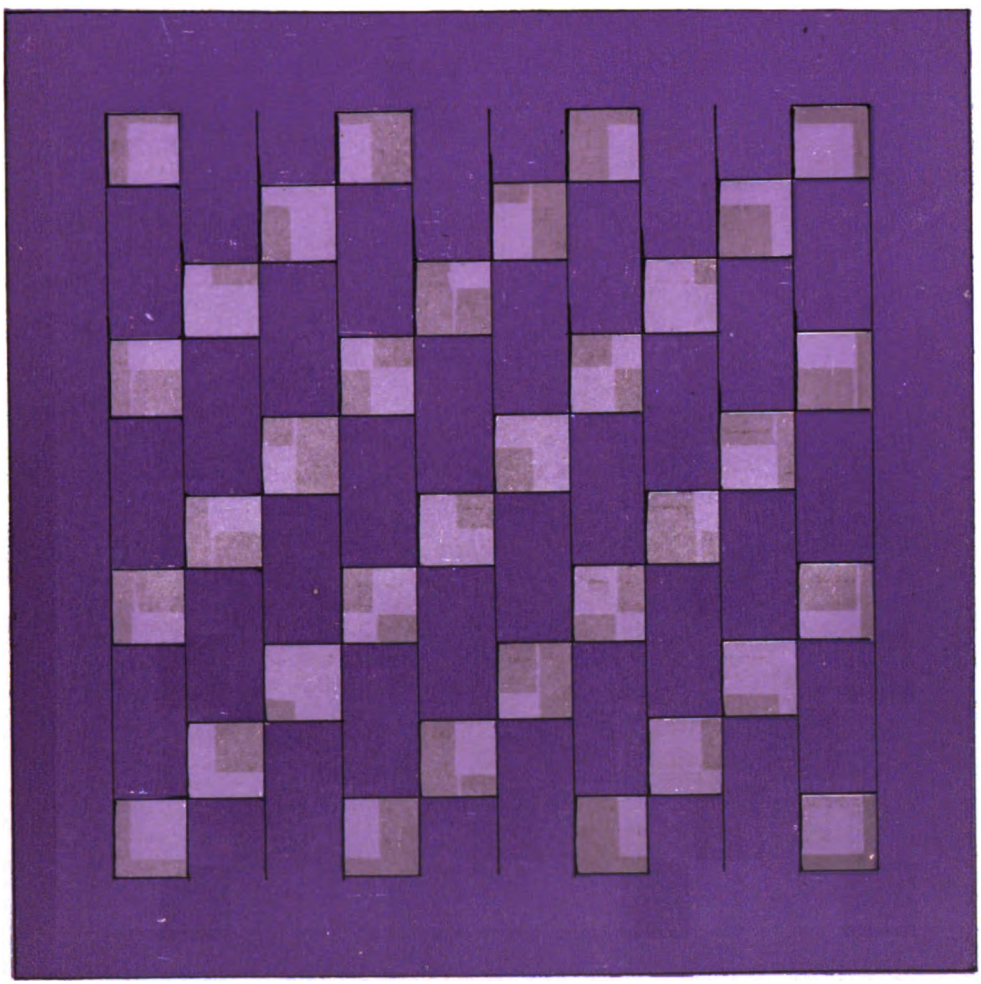

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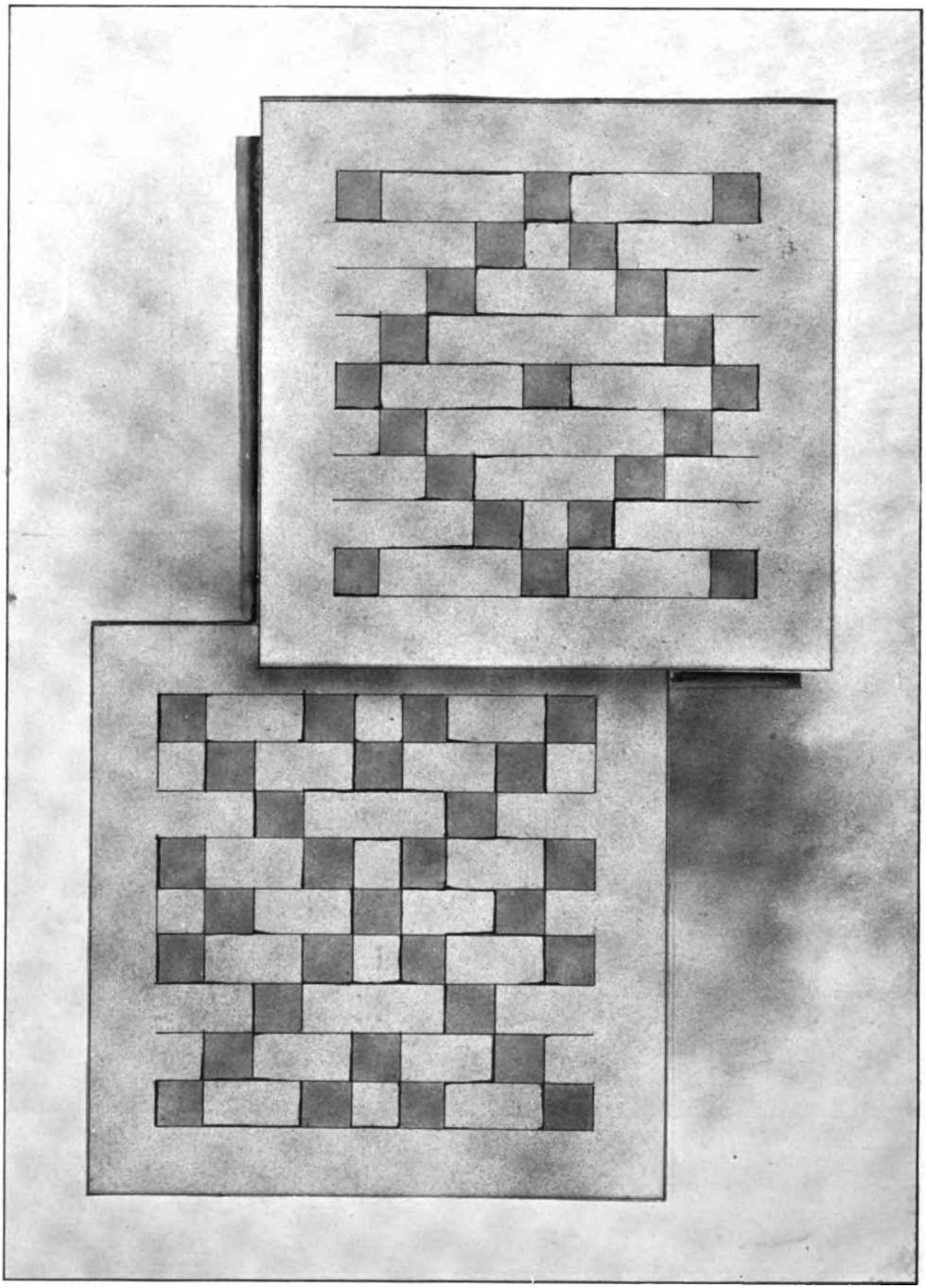

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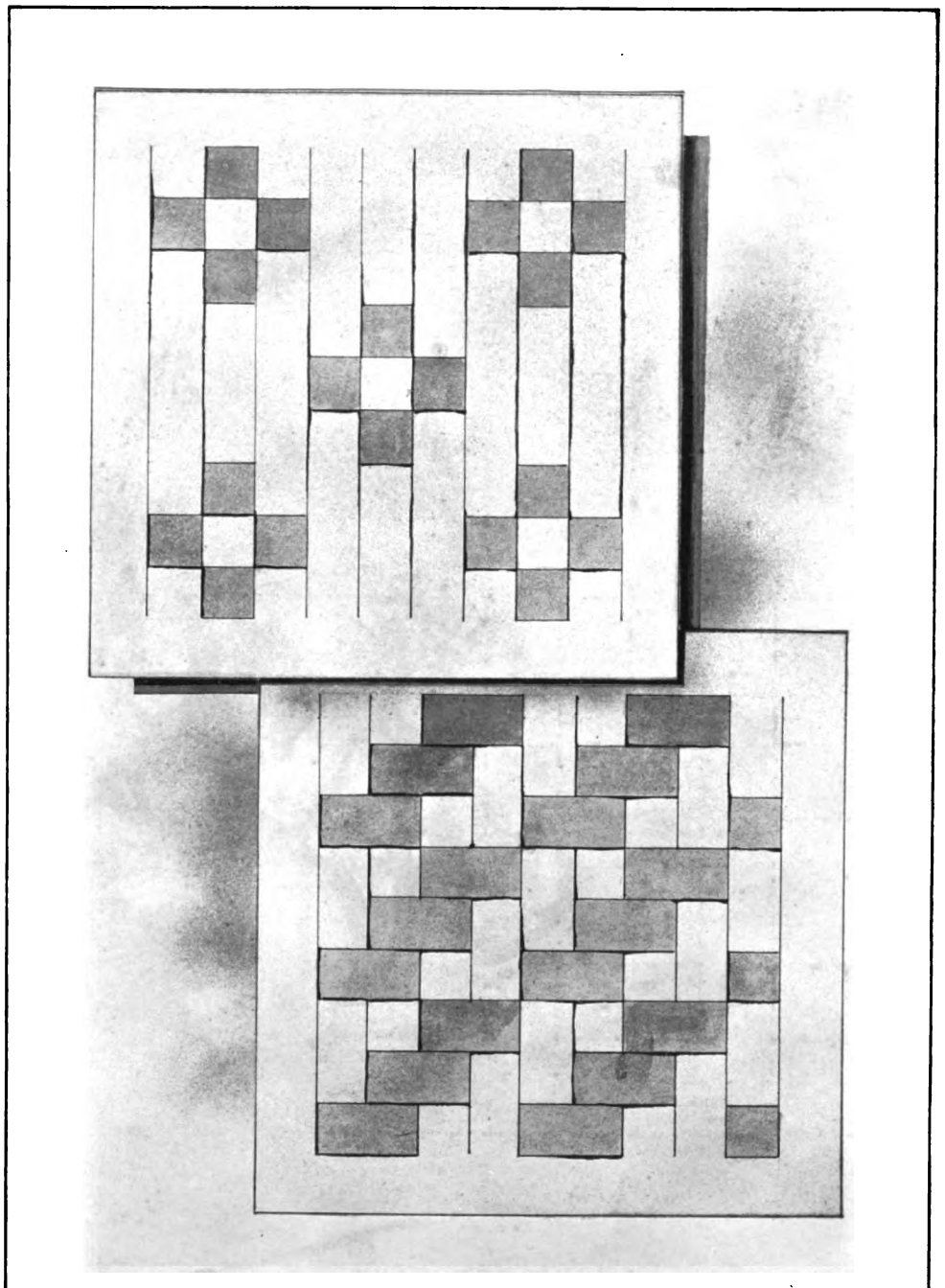

WEAVING DESIGNS

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FOLDING *and* CONSTRUCTION WORK

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It is not the knowledge that is stored up as intellectual fat which is of value, but that which is turned into intellectual muscle.—Herbert Spencer.

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FOLDING AND CONSTRUCTION WORK

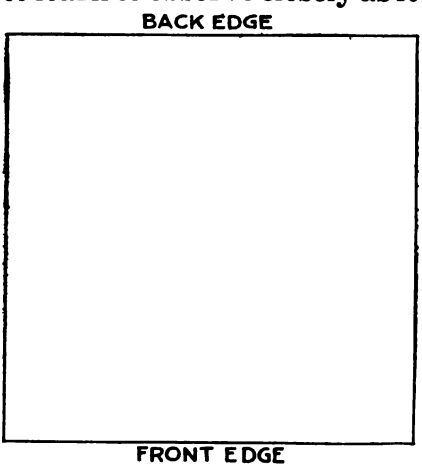
FOLDING

This occupation is invaluable for mental discipline, for accuracy, and for the training of the hand and eye.

The mind must be intent upon the work, in order that each dictation may be executed with alacrity and accuracy. The interest in making these forms and the pride in the finished object is intense.

Very early the child learns that one careless fold spoils the symmetry and beauty of the form. After the first two or three lessons the corners folded upon corners will not be a hair's breadth apart.

In giving a dictation exercise, show the class by making the fold whenever necessary. It is as valuable and as practical a lesson to learn to observe closely as it is to follow dictation.



It is an ironclad rule that the square must not be lifted from the desk, nor must it be turned to facilitate folding, except when so dictated, otherwise certain confusion will follow.

In the following exercises it is not in-

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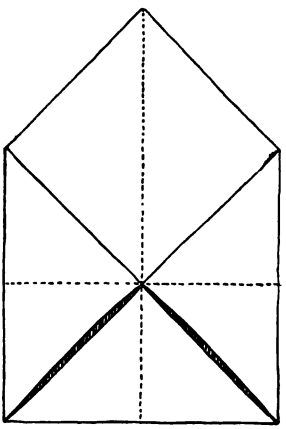
tended that these dictations shall be given verbatim to the class. They are made very simple, however, and will require but slight adaptation.



The edge next the front of the desk is the front edge of the paper; the opposite edge, corresponding with the back of the desk, is the back edge.

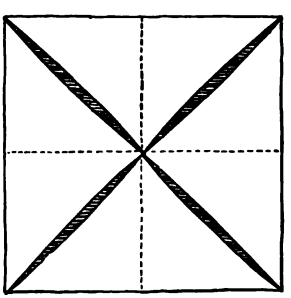
1. *Wall Pocket.*—Fold front edge to back edge. Unfold. Fold right edge to left edge. Unfold. Turn the square so that one corner points to the front.

Fold the right corner to the center.

Fold the left corner to the center.

Fold the front corner to the center. Use a piece of parquetry paper to paste the three corners at the center.

2. *Envelope.*—Fold the wall pocket. Fold the fourth corner to the center. To save a vast amount of useless repetition several dictations have been combined in the one above, "Fold the wall pocket," but when working with the class each dictation should be given separately each time.



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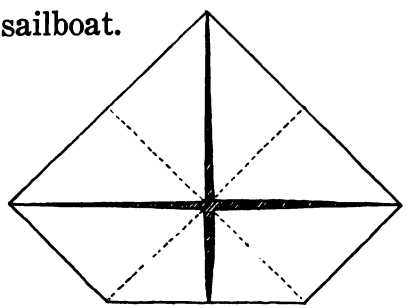
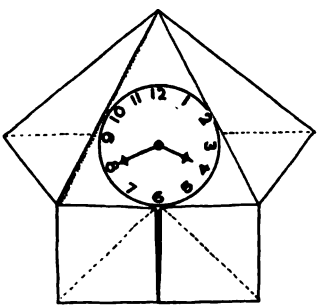
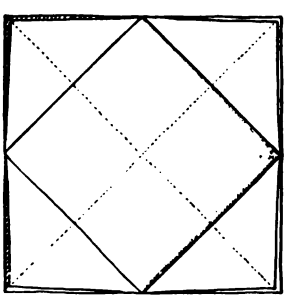
3. Sailboat.—Fold the envelope, turn the form over, with one corner pointing to the front. It is now a small square, plain side up. Fold the front corner to the center. Turn the form over. It is the sailboat.





4. Clock.—Fold the envelope. Turn the form over, placing it so that a corner points to the front. Fold the front corner to the center. Fold the right corner to the center. Fold the left corner to the center. Turn the form over. Here we have two corners that meet at the center like the closed doors of a tent. Each of these corners must be lifted and folded back to open the doors. A small clock face cut from a jeweler's catalogue and pasted on this form completes the clock.

5. Picture Frame.—Fold the envelope. Turn the form over, plain side up, with one corner pointing to the front. Fold each corner to the center. In dictating do not give a general dictation, but fold one corner,



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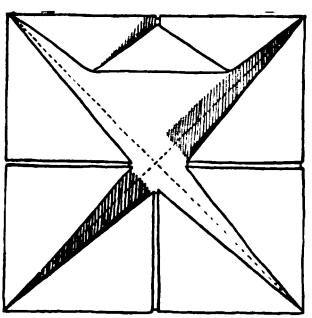
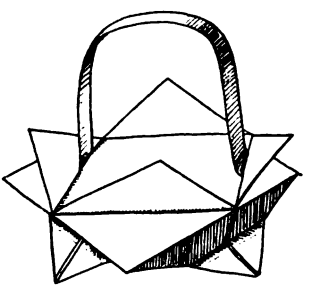
then its opposite, the third, then its opposite, thus developing the idea of symmetry. Turn the form over. Fold the front right corner at the center back so that it lies on the front right-hand corner of the square. Give this direction for each corner at the center.

6. Cake Basket.—Fold the picture frame. Turn the form over. Here we have four corners which meet





at the center. Fold the corner next the front back to the middle of the front edge. Repeat this fold with each of the remaining corners at the center.

Turn the form over. Using a straight strip for a handle, insert the ends of the handle into two opposite corner pockets and paste.

7. Saltcellar.—Place the square on the desk with one corner to the front. Fold the front corner to the back corner. Unfold.

Fold the right corner to the left corner. Unfold.

Fold the envelope.

Turn the form over, plain side up, with one corner pointing to the front. Fold each corner to the center.

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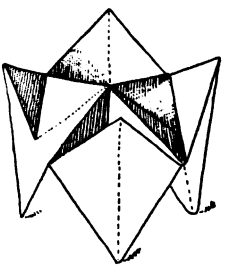
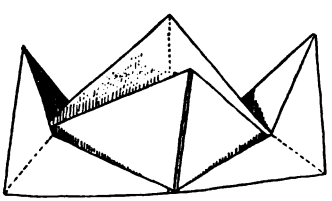
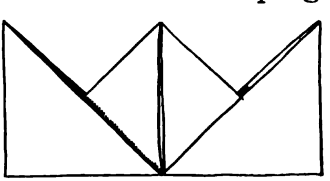
Turn the form over. There are now four corners meeting at the center. Slip the little finger deep into one pocket, the third finger into the next, the first finger into the next, the thumb into the last. In doing this it will be found that the corners have a tendency to bend downward. Fold them down by bringing the fingers together until the four corners come together at one point. Upon removing the fingers, the corners will naturally spread a little and the saltcellar will stand on four points.



8. King's Crown.—Fold the diagonals. This dictation is given in folding the saltcellar. Fold the envelope. Turn the form over. Fold each corner to the center. Turn the form over, placing it on the desk, so that one corner points to the front. Again we have the four pockets, the corners of which meet at the center. Slightly raise the corner of the right-hand pocket; also of the left-hand pocket. Fold the front corner to the back corner, at the same time keeping the right and left pockets open so they will not be included in this fold. Press these two corners down toward the back.





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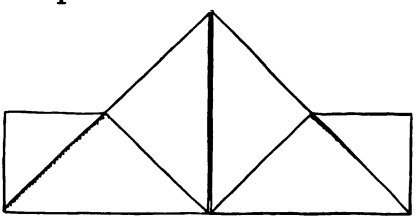
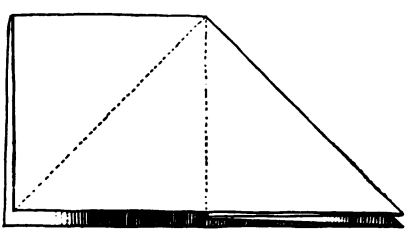
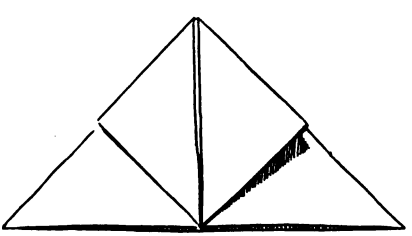
9. Queen's Crown.—Fold diagonals. Fold the envelope. Turn the form over. Fold each corner to the center. Turn the form over, one corner at the front. Turn the corner of the right-hand square which touches the center back so that it lies on the outside corner. This fold is the same as the turning back of the corners of the picture frame. Repeat with the corner of the left-hand pocket. Raise these little half pockets and fold the front corner to the back corner as in making the king's crown.





10. Soldier's Cap.—Fold the diagonals. Fold the back edge to the front edge. Do not unfold. Take the back right-hand corner of this rectangle, bring it forward *between* the two corners at the front to the middle of the front edge. In the same way bring the back left-hand corner forward to the middle of the front edge. There are now two corners, one on top of the other at each side. Fold the upper cor-



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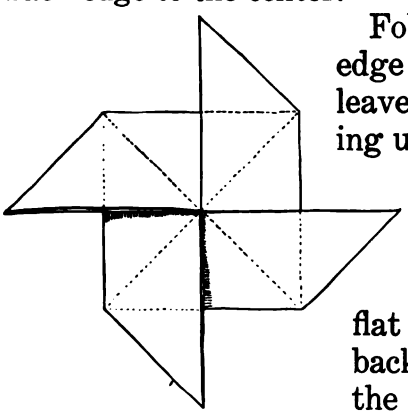
ner at the right to the vertex of the triangle. Fold the upper corner at the left to the vertex of the triangle.

11. Christmas Tree.—Cut a green rectangle, made by cutting a 4 x 4 square in halves, into a fringe with strips about one eighth of an inch wide. Wind these, using paste, first one then the other, around a five-inch green stick, about half way down. A small hemisphere of clay for a base will make it stand alone.

12. Windmill.—Fold diagonals and unfold. Fold front to back. Unfold. Fold right to left. Unfold. Fold the middle of the front edge to the center. Fold the middle of the back edge to the center.



Fold the middle of the right edge to the center. This must leave the two corners standing upright like two ears.

Fold the middle of the left edge to the center. All of the corners are now standing; fold them flat so that one points to the back, one to the right, one to the front, one to the left.

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CONSTRUCTIVE WORK WITH COVER PAPER

This series of folds is a step in advance of the kindergarten folds of the previous chapter. It is therefore suitable for first-year work after the class has completed the other course, or may be given to second or third year classes without taking up the kindergarten folds.

The materials for this course are construction paper, cut 7 x 7, scissors, and paste. A heavy manila may be substituted for cover paper, though the latter is more attractive, as it is obtainable in colors.

It is suggested that a playhouse made of boxes be furnished in connection with this course. Large weaving mats or raffia mats may be used for floor covering. This will be an object of great interest and pride.

The fundamental fold in this series is the sixteen square, the dictation for which is given below, after which it will not be repeated in full. In work with the class the dictation should be repeated in full each time.

In connection with this course of dictated work, children should be given frequent opportunities to work out their own ideas of the various models. If the child has preconceived notions, or if, through observation, he receives a modified impression of some dictated form, by all means let him express it. The purpose of this course will be lacking if it does not

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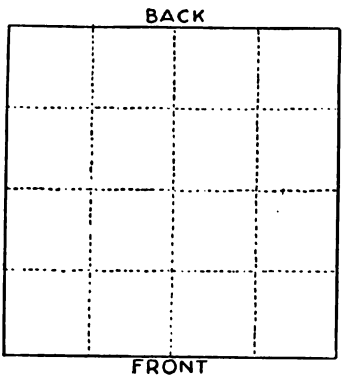
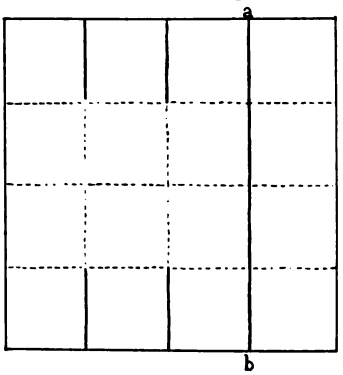
develop power to work originally and independently. With this end in view, occasionally give the class squares of paper for "free work." In some instances it will be well to name the object they will make the next day, with the injunction to observe such objects and be ready for work. Variations of a form already made may be suggested; if it is the cart, a seat might be added, or a top, or, it might have four wheels, while some inventive spirits will certainly devise axles.



At other times let them make whatever they wish, being sure that they have some plan in mind before they begin work; aimless effort must not be allowed.

Sixteen Square.—Fold front edge to back edge. Unfold. Fold right edge to left edge. Unfold. Fold front edge to middle line. Fold back edge to middle line. Unfold both folds. Fold right edge to middle line. Fold left edge to middle line. Unfold both folds. This gives the sixteen square.



1. Basket.—Fold the sixteen square. Cut along the

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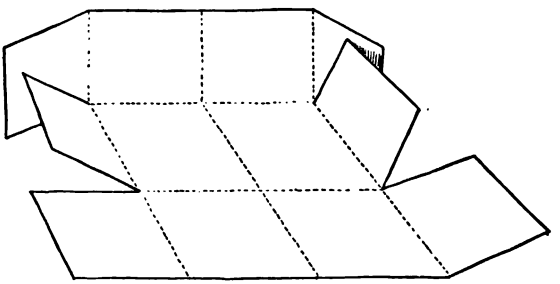
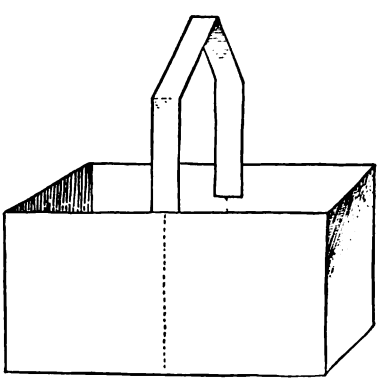
heavy line *ab*, cutting off one strip of squares. Place the larger piece remaining on the desk with the narrow edge to the front. We have now two creases going from front to back, and three from left to right.



Cut the two creases at the front to the first transverse crease, or the depth of one square as indicated by heavy lines in the diagram. In the same way cut the



creases at the back. Stand up the sides, fold the three squares at each end, one over the other, and paste, and an oblong box is made. Cut a handle from the strip that was detached, and paste on the inside of the middle of each side.

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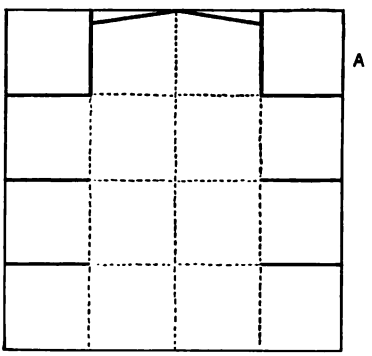
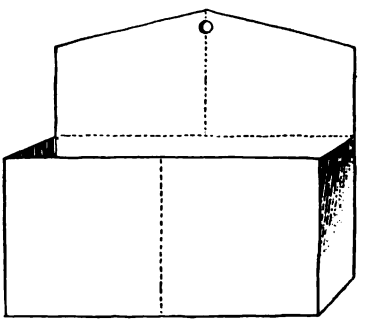
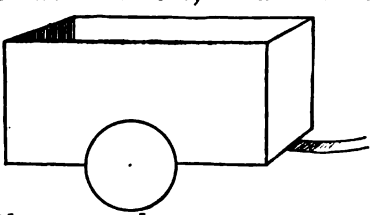
2. Wall Pocket.—Fold a sixteen square. Cut out the two corner squares at the back, make two cuts in the right edge, and two in the left as shown by the heavy lines in diagram A. Fold the three squares





at each side to form an oblong box like the basket. This leaves a rectangle standing at the back; trim off the corners; it forms the back of the wall pocket.

3. Cart.—Fold an oblong box like the basket. Trace around inch tablets, and cut out the wheels.



Either paste these on the cart, or use a toothpick for an axle, or fasten them on with small collar buttons. Cut a tongue from the detached strip.

4. Sofa.—Fold an oblong box like the basket. Provide each child with an extra piece four squares

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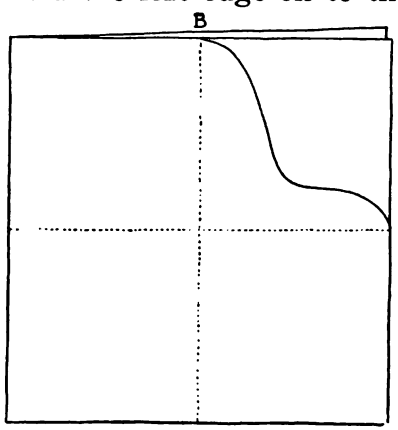
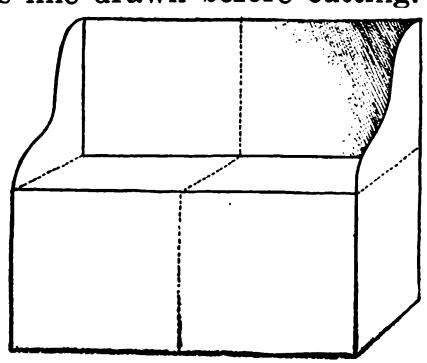
long by two squares wide, or one half of the six-inch square. Placing this on the desk with the long edge to the front, fold the left edge on to the right edge.



Keeping it folded, cut the back, right squares, as shown by the curved line, diagram B. It is advisable to have this line drawn before cutting. Using the



box inverted for the body of the sofa, paste this piece around it, so that it forms the back and arms.

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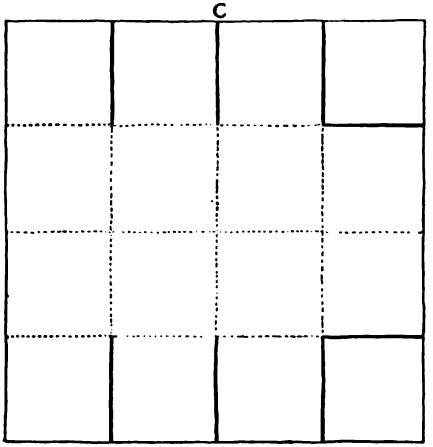
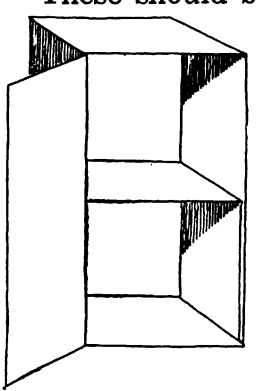
5. Cupboard.—Fold the sixteen square. Cut on heavy lines shown in diagram C, cutting out two corner squares at the right. Fold to form an oblong box with cover. Give each child an extra strip three squares long by one square wide. These should be prepared by the teacher; one sixteen square can be cut into five strips of three squares each. The square in the middle is a shelf. The end squares are supports. The box standing on end is a cupboard with a door. Apply paste to the supports and fit the shelf across the middle of the cupboard; see that the supports touch the bottom and the shelf is bound to be in straight.

C





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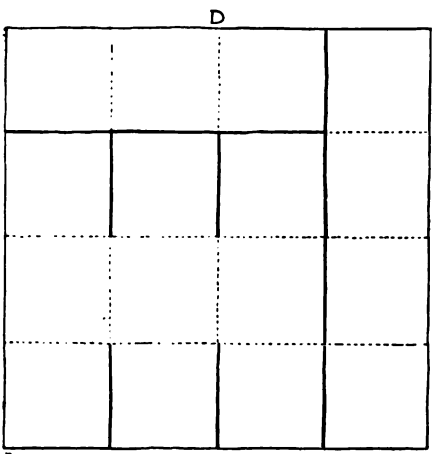
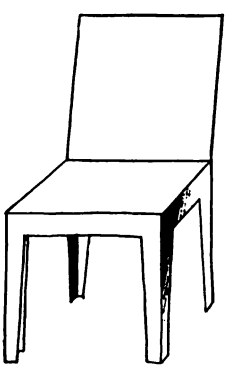
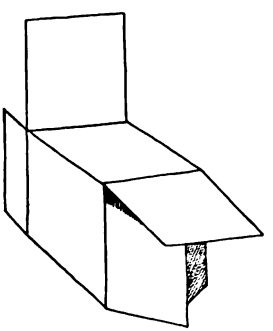
6. Chair. — Fold the sixteen square. Cut off a strip of four squares at the right. Cut off a strip of three squares at the back. This leaves a nine square; make two cuts at the front and two at the back, as shown in diagram D.



Stand up middle square at the back for the back of the chair; fold down the sides and front, fitting three squares, one over the other, at the front and two at the back. If the class is proficient, let them





cut out small squares from the sides upon which the box stands; this makes the legs. Be sure the paste is dry before cutting.

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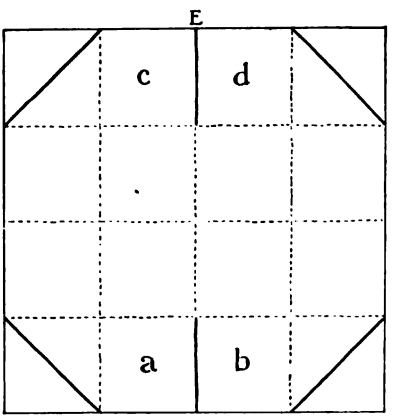
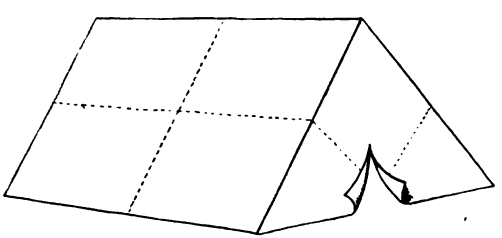
7. Tent.—Fold the sixteen square. Cut heavy lines, diagram E. Lines may be ruled for the diag-



onals of corner squares. Fold on the middle vertical line; fold square *a* so that it lies on *b*, and *c* on *d*.



After the paste is dry, make one cut in the end for a door.

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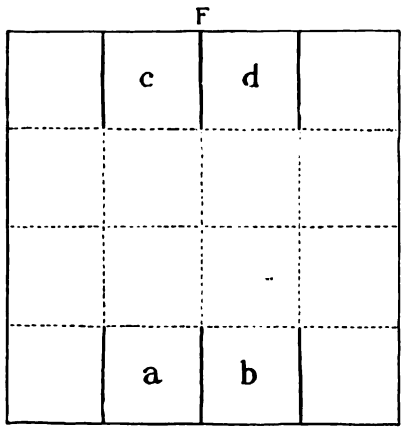
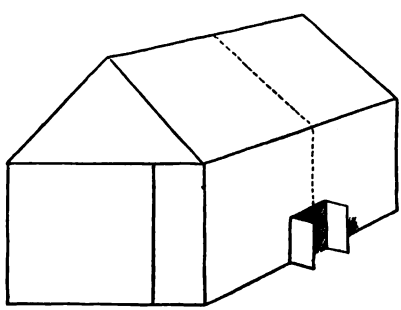
8. Dog House.—Fold sixteen square. Cut heavy lines, diagram F. Fold square *a* on *b*, and *c* on *d*, as



in making the tent. This makes the roof of the house. Fold the sides down straight, folding the corner



squares one over the other to form the ends of the house. Cut a door in the side.

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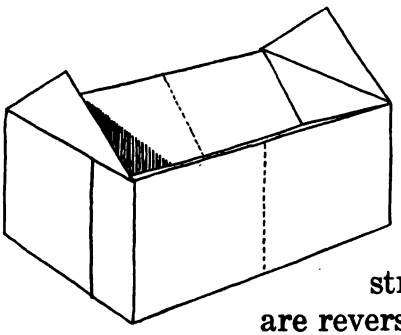
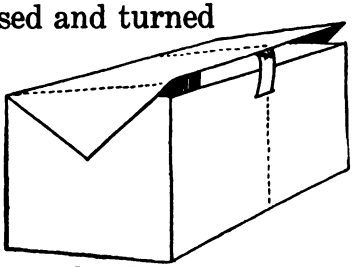
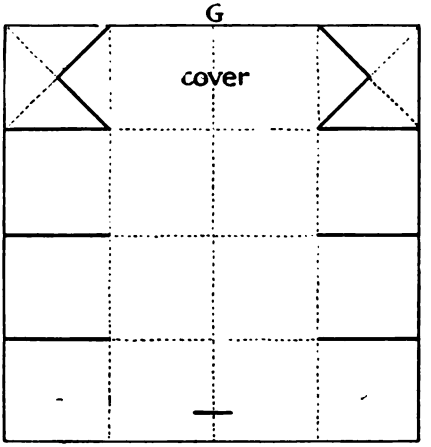


9. Trough.—Fold sixteen square and cut as for dog house. Fold and paste square *a* on *b*, and *c* on *d* in the same manner. Instead of turning the straight sides down, they are reversed and turned back, leaving the roof inverted for a trough. Cut off the projecting corners.



10. Trunk.—Fold sixteen square. Cut on heavy lines, diagram G. It will be necessary to draw the diagonals of the two corner squares at the back to get the projecting angles on the cover. Make a box, leaving the side with the projecting angles for the cover. Paste a narrow strip on the under side of the cover in the middle of the front edge for a strap, mark, and then cut a short horizontal slit in which to fasten the strap.

G



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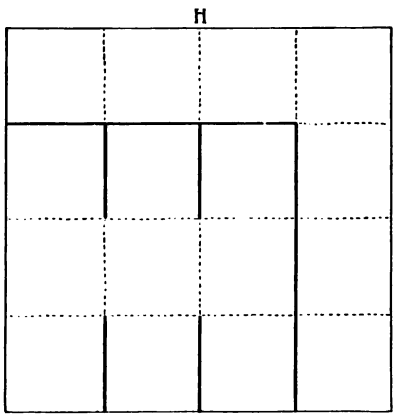
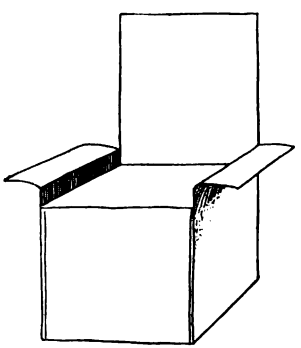
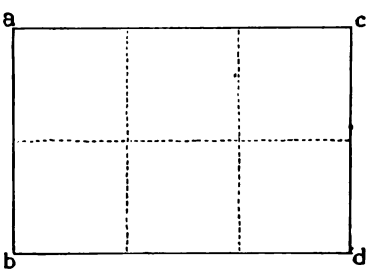
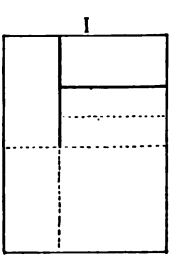


11. Armchair. — Fold the sixteen square. Cut heavy lines, diagram H. Fold and paste to form a small square box. Have prepared pieces of paper two squares by three squares for the back and arms. Fold this so that the edge *ab* lies on the edge *cd*. Cut as in diagram I. If this seems very difficult, let the children mark it first, and cut after inspection. The







corners of the back may be rounded. Unfold and paste around the box, letting the bottom of the box be the seat of the chair.

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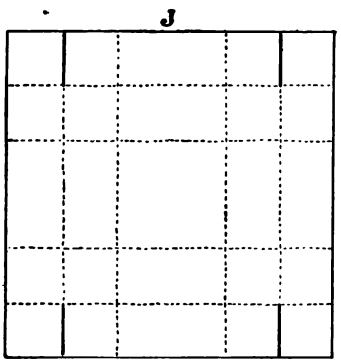
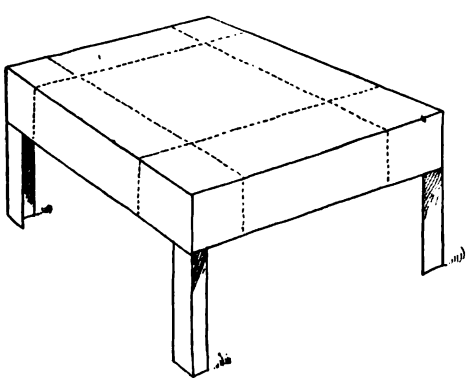
12. Table.—Fold the sixteen square. Cut off one strip of four squares, leaving a rectangle four squares by three squares. Cut off from one end of this rectangle a strip of three squares, leaving a square three squares by three squares.



Fold the front edge to the next parallel crease. Fold the back edge to the next crease parallel to it. Unfold both folds. Fold the right edge to the next crease parallel to it. Fold the left edge to the next parallel crease. Unfold both folds. We now have creases one-half square from the edge all around. Make two cuts at the front and two cuts at the back, each one-half square in length, as indicated in diagram. Fold and paste, making a shallow square box, one-half square in depth, which serves as the table top. From the detached strips cut four short strips, each one and one-half squares long and



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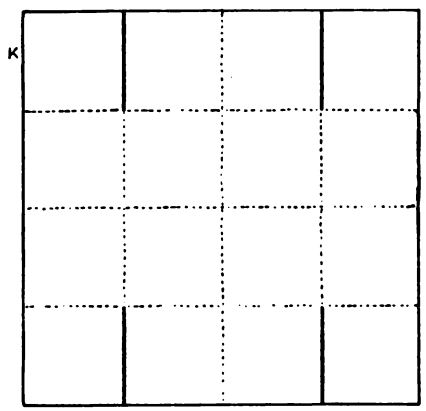
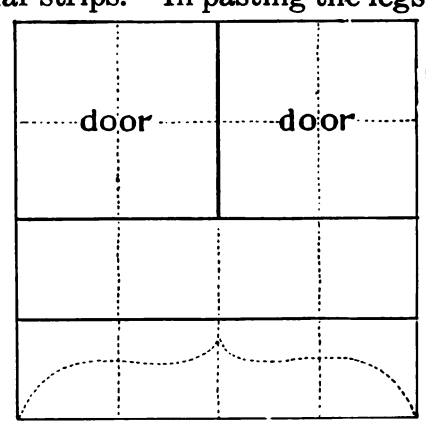
one square wide. As it is important that these be of the same length, place them together and make the ends even. These pieces, which now measure one by one and one-half squares, are to be used as the legs. Placing one of these short strips on the desk with its long edge to the front, fold as follows: Fold the front edge to the back edge. Unfold. Fold the front edge to the middle line; fold the back edge to the middle line. Do not unfold, but insert paste under the edges, meeting at the middle line, making a strong table leg. Repeat this with the remaining rectangular strips. In pasting the legs in the corners be sure that each leg touches the under side of the top of the table. This insures their being of equal length.



13. Washstand. —This requires two of the six-inch squares. Fold two sixteen squares. Cut



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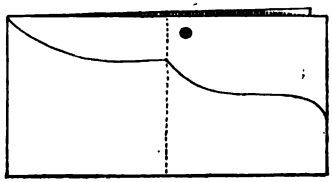
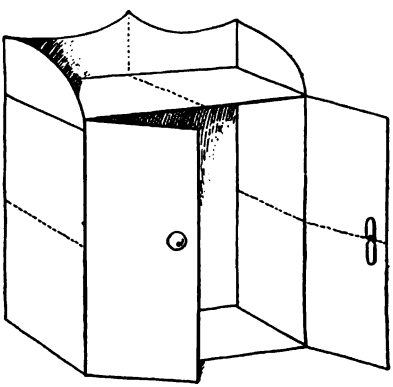
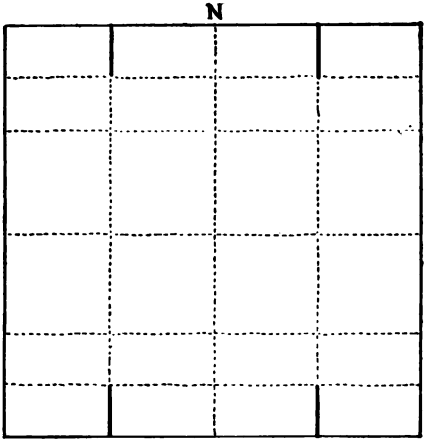
one on heavy lines in diagram K, and paste to form a box two squares by two squares on the bottom and one square deep. Cut the other on heavy lines in diagram L. The two smaller squares, measuring two squares each way, are doubled to form the doors; paste is applied to one half of this square and it is fitted to the inside of one side of the box; the other half forms the door. The other door is applied the same way on the opposite side. A strip of four squares is doubled and cut for the board around the top, diagram M.

M





N



14. Bed. — Fold the sixteen square. Fold the front edge to the first crease parallel to the front. Fold the back edge to the

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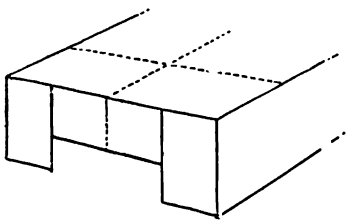
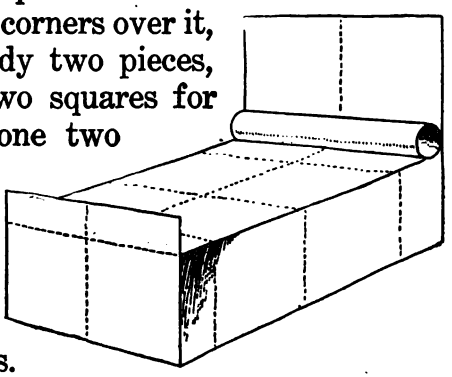
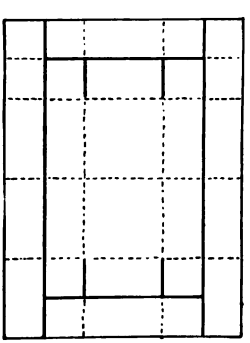
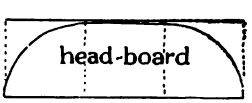


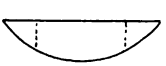
first crease parallel to the back. Unfold both folds. Cut on heavy lines in diagram N. It will be noticed that the cuts are only half a square in length. Fold the middle rectangular piece at each end down, and the half squares at the corners over it, and paste. Have ready two pieces, one two squares by two squares for the head board, and one two squares by one and one-half squares for the foot; paste one on each end, thus covering the space left by the half squares.



A pillow can be made by wrapping and pasting a white paper around a pencil, then slipping it off. A small weaving mat may be used for a quilt.







15. Cradle.—Fold the sixteen square. Cut off one strip of four squares. Fold each edge to the next parallel crease and unfold. These

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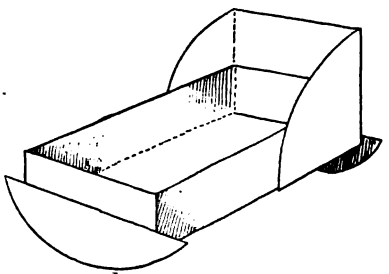
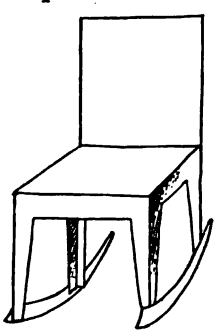
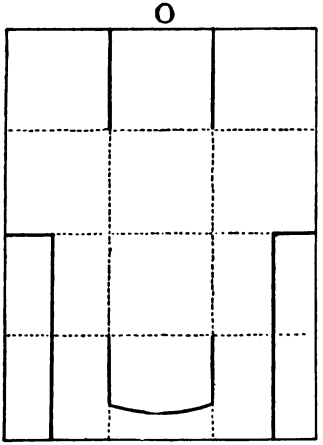


new creases make the heavy lines which are to be cut in diagram. Cut the longest lines first. Fold and paste the box, which will be two squares long, one square wide and one-half square deep. The head-piece and rockers, which should be doubled and cut, are pasted on afterward.



16. Rocking-chair.—This is made exactly like the first chair, No. 6, with the addition of the rounds and rockers, which are cut separately and pasted. It requires a delicacy of touch to paste these small pieces; therefore this model is placed near the end of the series.

O



17. Go-cart.—This requires two of the sixteen squares. Fold a sixteen square. Cut off one strip of four squares. Draw lines shown in diagram O. By this time the class ought to be able to work from a blackboard diagram. After inspection, allow them to cut on these lines. Fold to make

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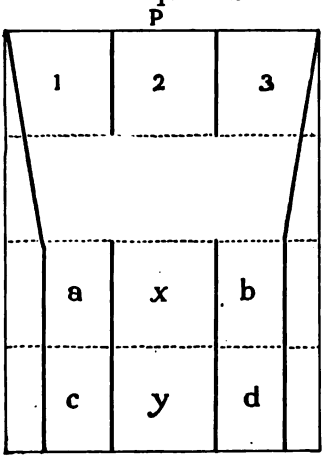
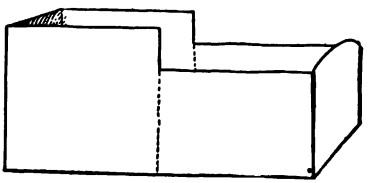
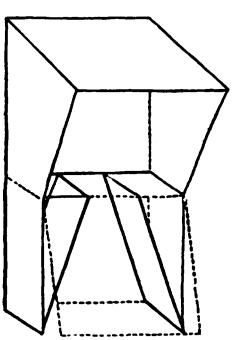
a box, which forms the body of the go-cart. Cut a "shaving" off the foot-board to make it the right height. For the top, fold the other sixteen square. Cut off one strip. First mark heavy lines in diagram P; after inspection, cut.

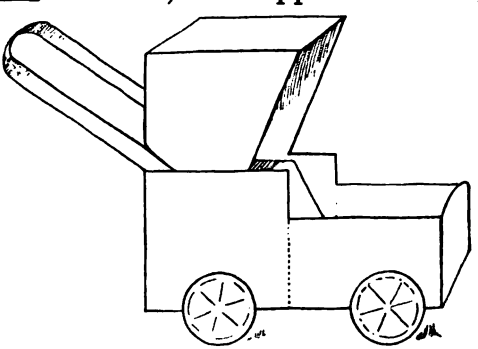
These squares marked 1, 2, and 3 are folded one





over the other for the top. The square marked *x* is the seat. The squares *a* and *b* are pasted to the sides of the go-cart, while *c* and *d* turn up under, meeting in the middle, and support the seat;





y is the apron which comes down in front over the supports. Use the detached strips for handle and

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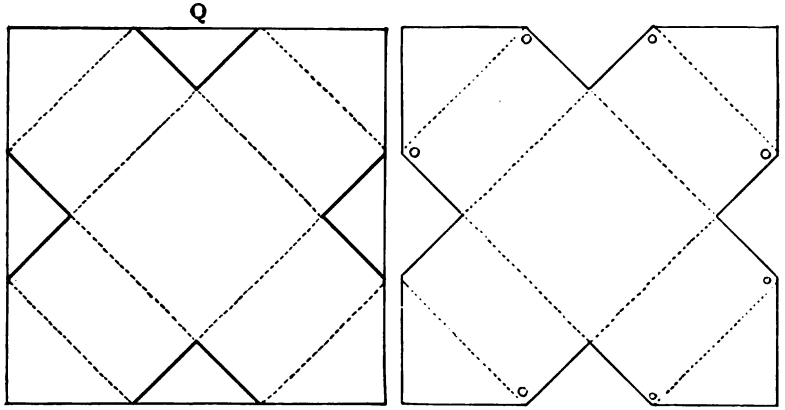
wheels. The handle is a long, straight strip, five squares long; the wheels are traced and cut, then pasted; the supports under the seat do not allow the use of toothpick for an axle. By making round holes with a punch in the buggy and corresponding ones in the wheels collar buttons may be used to fasten on the wheels. In this connection use the shortest collar button obtainable.

The next four forms introduce work with the ruler.

Q



A few preliminary exercises to familiarize the class with the use of the ruler should be given. These forms are too difficult for average first-year work.

18. Box.—The same sized square is used. Divide each side into thirds by placing marks at 2 and 4 on the ruler. Draw lines, using the ruler, connecting these marks as in diagram Q. Cut out the small tri-

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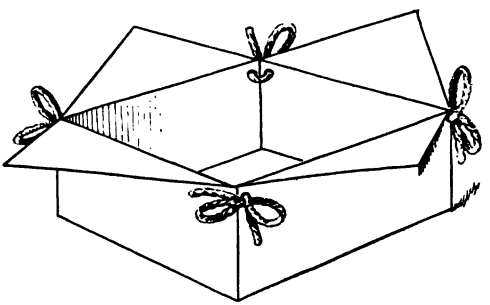
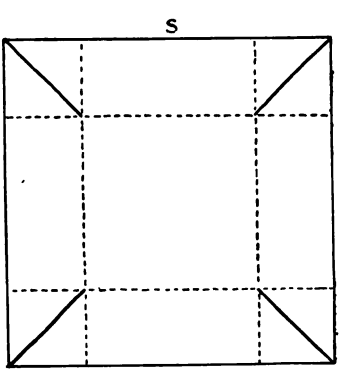
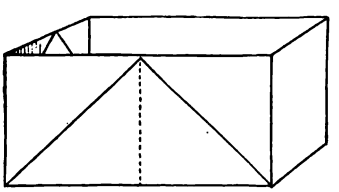
angular pieces at the sides indicated by heavy lines. Fold up the sides on lines; turn back the corners. Punch holes and tie with ribbon or zephyr.



19.—Place a mark one and one-half inches from each corner on each side of the square. To avoid mistakes, let each child find one and one-half inches on the ruler and mark it with a colored pencil. Connect marks as in diagram S, and cut the heavy lines at the corners. Stand up the sides and paste,



letting two flaps go inside and two outside the box at each end. The flaps should be flush with the top edge.



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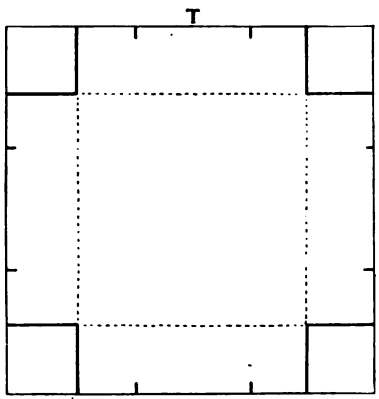
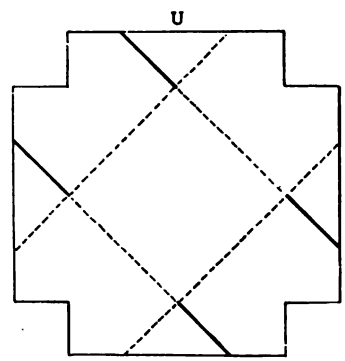
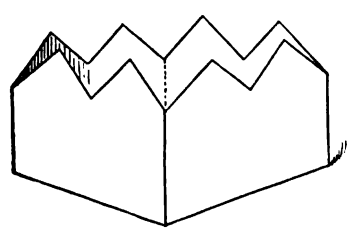
20.—On each side of the square place marks at 1, 2, 4, and 5 inches from the corner. Connect the marks one inch from the corners, as in diagram T, and cut





out the corner squares as indicated by the heavy lines. Now draw connecting lines shown in diagram U, and cut the heavy lines. Stand up the sides, making each flap go inside.



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The starting point of thought is by sense impression,—the direct impression that is produced by the world in our internal and external senses.—Pestalozzi.

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THE UTILITARIAN SIDE

While the utilitarian side is ofttimes a necessary one, it should by no means follow that each sewing card or weaving mat made is valueless unless put to some practical use. It is a mistaken idea, and one that should not be developed,—that of measuring the value of effort or labor only by the practicality or commercial value of the result. The true appreciation of a color harmony, or a rhythmic motive, is a feeling harder of cultivation, but one which, when developed, brings its own reward.

For those times when the practical application may be desired, a few suggestions are here offered.

The weaving mat or sewing card may be converted into a calendar, match-scratcher, or wall pocket, as illustrated.

A pretty gift blotter may be made by pasting a sewing card or weaving mat to blotting paper of the same size, or either of these may be used for the cover to shaving papers or blank leaves for laundry lists.

Other uses will be found under "Holiday Work."

A FEW SUGGESTIONS

In order to have each class on schedule time, it is necessary to have the distribution and collection of ma-

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terials reduced to a science minimizing the time required and avoiding confusion between classes. It is of course necessary to have all the materials prepared and ready for use. Sewing and weaving should be kept in individual cases, in which the needle may also be kept. Sticks should also be in individual boxes, so that counting out a certain number each time will not be necessary.

Paste may be passed quickly by placing a small amount on a little piece of paper on each child's desk. This does away with collecting or washing paste dishes and small amounts left over may be passed freely to those who have not enough.

In large classes it will be found helpful to keep the materials belonging to each row, or class, separate; they can be distributed much more quickly and readily if kept in this way. The small, wooden butter trays used by grocers are convenient for passing sticks, tablets, word-cards, etc.

* * * * * * * *

A mounting book, in which the sewing, cutting, weaving, and other forms of hand work can be preserved is a matter of great pride. It makes a Christmas gift which is ofttimes preserved for years.

Plain ingrain wall-paper or cover paper are suitable materials for mounting books.

Pretty cover designs for mounting books may be made with parquetry forms.

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HOLIDAY WORK

For Thanksgiving.—Sew and color leaves, turkeys, or pumpkins. Cut "Mayflower," pilgrim, bows, and arrows.

For Washington's and Lincoln's Birthdays.—Fold picture frames for miniature pictures of Washington and Lincoln. A red and a blue frame, one for Washington and one for Lincoln, may be tied with white ribbon.

For Valentine's Day.—Cut or sew birds and hearts. A heart cut from gold or colored paper and pasted in the folded picture-frame makes a pretty valentine. A sheet of small embossed flowers is indispensable at this time.

For Easter.—Sew or cut butterflies. Sew or cut a chicken peeping from a shell.

For May-day.—Several baskets or boxes are given in the chapter on "Folding," which may be used as May-baskets. Cut and color flowers and leaves.

For Christmas.—Until children are of school age, they, as a general rule, think of Christmas only as a time when they receive presents. As early as possible they should learn that the true Christmas spirit is to make others happy—that "it is better to give than to receive."

It is well worth any trouble it may have been to see the shining faces as they take home their mysterious, well-wrapped packages to hide—O, the delight of it!—till Christmas morning. It may be only a col-

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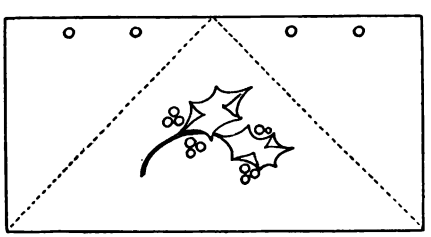
ored drawing, but, if it is dignified by the addition of a calendar pad, the child tastes the joy of giving something made by his own hands.

* * * * * * * *

A flower or sprig of holly may be sewed and colored in each outward turning corner of the box on page 140; make the box of a 7 x 7 square, tie the corners with ribbon, and we have a dainty trinket box.

Sachet.—Fold a 7 x 7 weaving mat diagonally. Place cotton and sachet inside. Paste or sew with several threads of zephyr, making a little tuft or bow at each corner of the triangle.

Bookmark.—Use a piece of cover paper or bristol board 2 x 4. Fold on dotted lines. Sew or paste a flower or butterfly cut from colored paper, and tie with ribbon.



A few designs are given for cards about 6 x 8. These may be used variously; a calendar pad may be pasted on; a piece of sandpaper will make it a match scratcher; the addition of the wall pocket on page 125 will make it a match-safe as well.

A small writing pad, 2 x 4, pasted on a sewing card or weaving mat, with a dainty pencil attached, will be convenient for mother when she writes a

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note. Blocks of pads are obtainable at the stationer's or printer's.

Cylindrical Box for Burnt Matches or Combings.—Mount an oblong weaving mat, 5 x 7, on heavy paper or bristol board of the same size to give it firmness. Curve or roll it to form a cylinder, the depth of which shall be the short dimension of the mat. Punch holes along the two edges which meet, and tie or lace with raffia, worsted, or ribbon. Fit to it a circular bottom, and fasten them together by tying or lacing as before. Make a handle of braided raffia or ribbon by which to suspend it.

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JANUARY

Sunday		3	10	17	24	31
Monday		4	11	18	25	
Tuesday		5	12	19	26	
Wednesday		6	13	20	27	
Thursday		7	14	21	28	
Friday	1	8	15	22	29	
Saturday	2	9	16	23	30	

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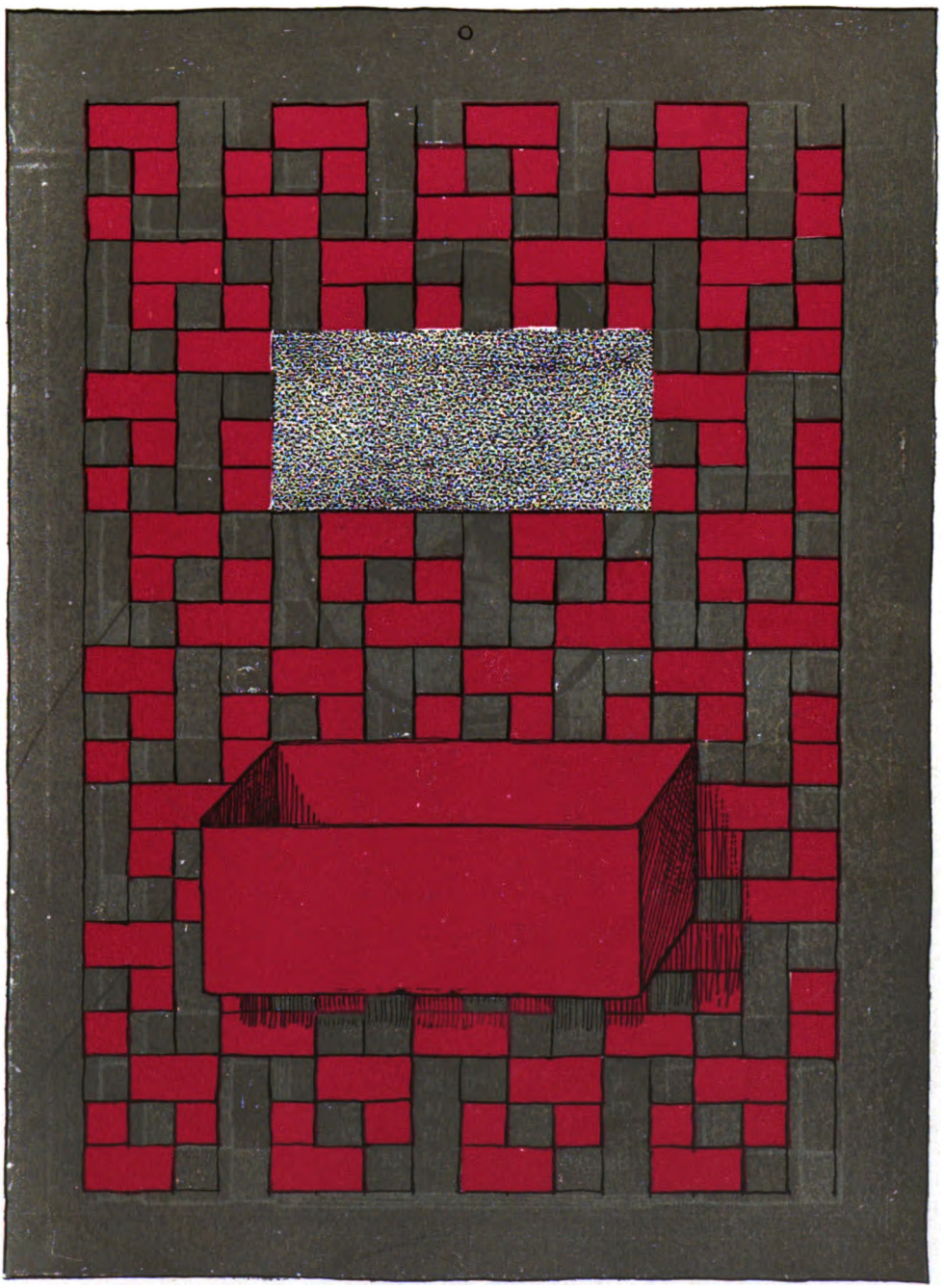

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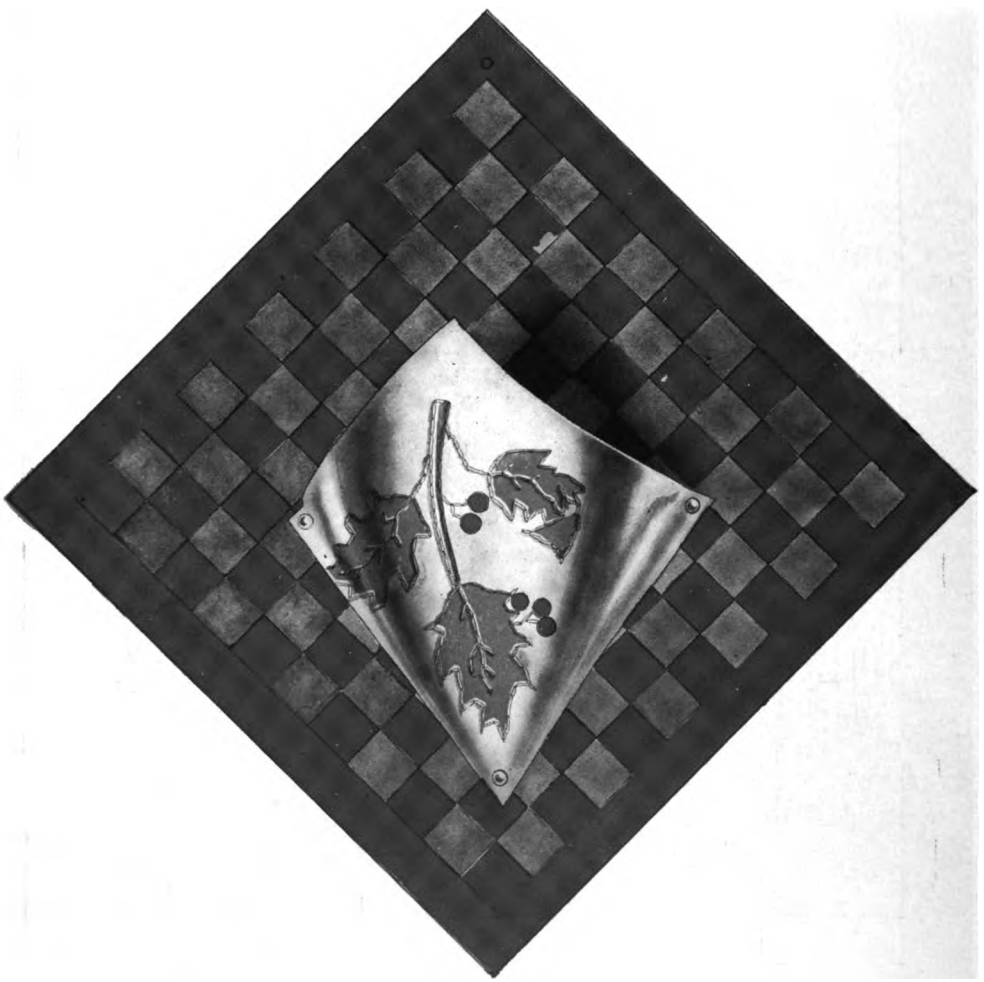

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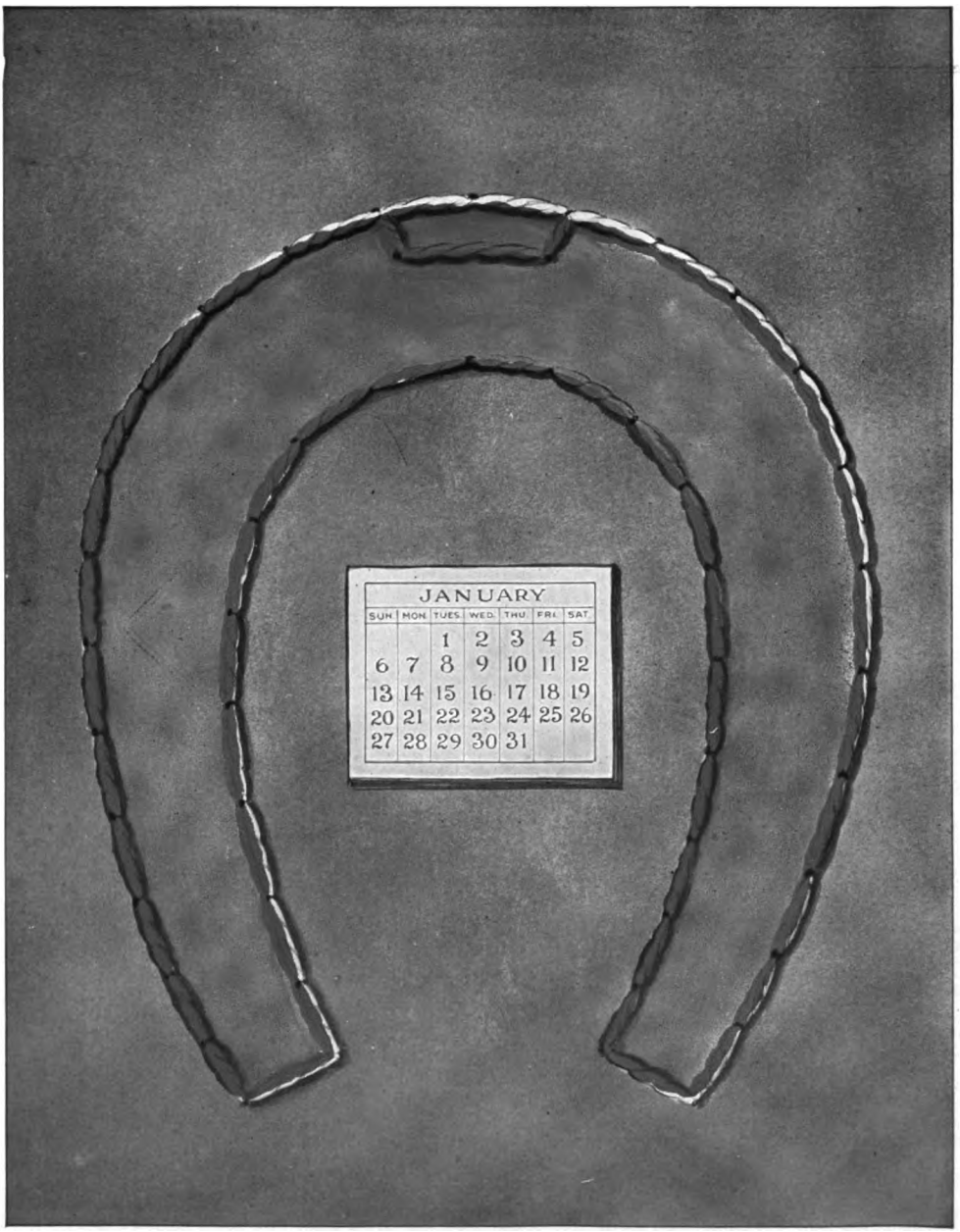

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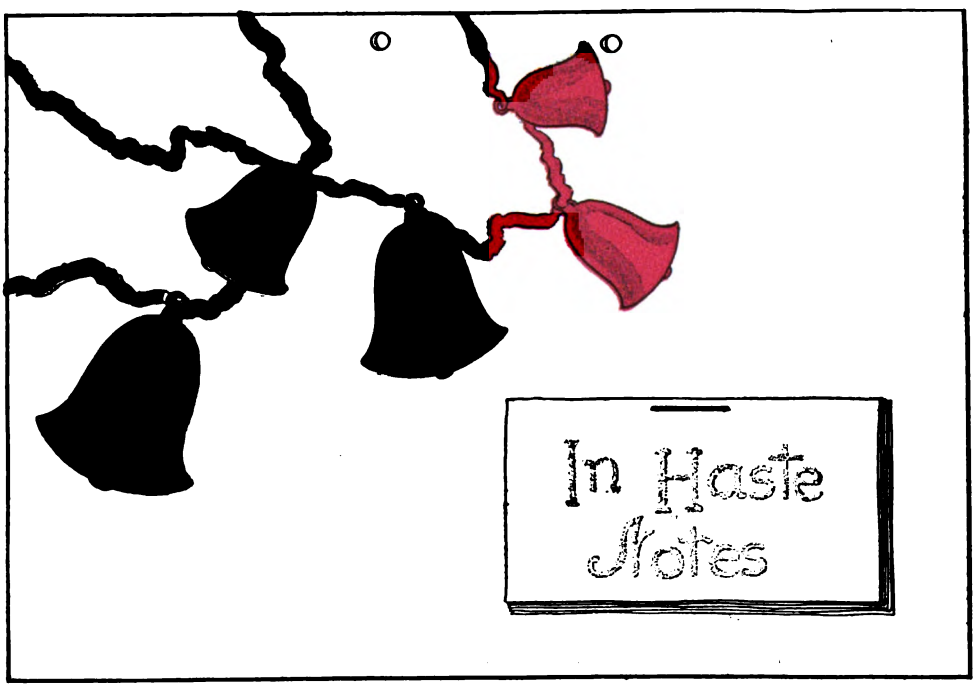

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This little Japanese lady may be substituted for the Chinese boy in the calendar. Both forms will be found simple enough for free-hand cutting.

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DAILY OUTLINES FOR HANDWORK

It is readily granted that the suggestions for work having been given, the program itself should be left free and elastic. In the face of this oft-quoted statement the following outlines are submitted for those teachers whose numerous duties do not give them time to plan all their work previously to their own satisfaction.

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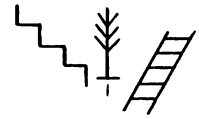
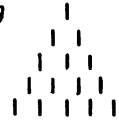
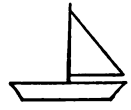
Handwork Outline For First Month September

	Mon.	Tues.	Wed.	Thurs.	Fri.
First Week	Stick-laying	Cutting Circle	Stick-laying 	Cutting Apple	Clay-modeling Sphere
Second Week	Cutting - Pear	Stick-laying Counting Lesson 	Clay-modeling Apple	Cutting - Fan	Sewing First card circle Sew around once
Third Week	Stick-laying	Clay-modeling Apple	Sewing Finish first card	Cutting Review previous work	Stick-laying Same as Monday adding Wind mill work without copy if possible
Fourth Week	Cutting - Boat 	Sewing Start second card	Clay-modeling Walnut	Stick-laying Repeat Friday's work with a copy or make boat	Weaving * Linen mat with wood slats - over one under one

* Substitute Construction Work for one of these occupations if time can be given to it. It is dictated work and requires supervision of teacher.

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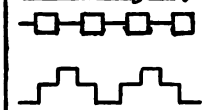
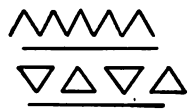
Handwork Outline For Second Month October

	Mon.	Tues.	Wed.	Thurs.	Fri.
First Week	Clay-modeling Make sphere and cut into hemispheres	Cutting Leaves from nature	Stick-laying 	Sewing *	Weaving *
Second Week	Stick-laying 	Clay-modeling Bird's nest (based on hemisphere)	Cutting Leaves Cut and color	Weaving	Sewing
Third Week	Cutting Pumpkin	Weaving	Stick-laying 	Clay-modeling Free work (Let pupils choose what they want to make)	Sewing
Fourth Week	Weaving	Stick-laying Invent borders	Sewing	Cutting Draw doors and windows with pencil	Clay-modeling Vegetable forms

* As the progress in weaving and sewing is not uniform, it is impossible to plan new work week by week. A sequence is given in each of these occupations in the chapters under these headings. It is quite feasible to let each pupil work individually. Give a new weaving-mat or sewing card as soon as one has been satisfactorily completed.

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Handwork Outline For Third Month November

	Mon.	Tues.	Wed.	Thurs.	Fri.
First Week	Clay-modeling Cube	Cutting Pumpkin from colored paper	Sewing	Stick-laying Counting lesson on page 22	Weaving
Second Week	Stick-laying Free work	Clay-modeling Leaf	Cutting Mayflower page 87	Weaving	Sewing
Third Week	Cutting Pilgrim page 87	Weaving	Sewing	Clay-modeling Coil basket (shape like hemisphere)	Cutting Wigwam and canoe
Fourth Week	Weaving	Stick-laying Make things with five sticks	Sewing	Cutting Turkey page 95	Clay-modeling Pumpkin

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Handwork Outline For Fourth Month December*

	Mon.	Tues.	Wed.	Thurs.	Fri.
First Week	Clay-modeling Work for month Dishes for Christmas Tea-pot – based on sphere	Cutting Fireplace and stocking	Sewing	Stick-laying Alphabet	Weaving
Second Week	Stick-laying Three chairs Three beds to illustrate Three Bears	Clay-modeling Pitcher	Cutting Tree and Presents for Christmas	Weaving	Sewing
Third Week	Cutting Bells Presents for Christmas	Weaving	Stick-laying Tree	Clay-modeling Sugar bowl	Sewing
Fourth Week	Weaving	Stick-laying Roman numbers	Sewing	Cutting Santa Claus	Clay-modeling Free work

* Special holiday work will be found on pages 145 to 154

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